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Tax/Billing/CAMA

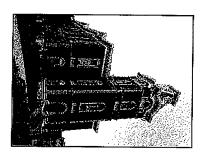
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## Articles of Agreement

# For Software and Professional Services

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## Henry County, Indiana

Ms. Jodie Brown Henry County Assessor 101 South Main Street, Courthouse New Castle, Indiana 47362

×.



Cole • Layer • Trumble Company 3199 Klepinger Road Dayton, Ohio 45406 (937) 276-5261 Tel. (937) 278-3711 Fax 800-800-CLT1 (2581) http://www.cltco.com

#### TABLE OF CONTENTS AGREEMENT

4	NON-SOLICITATION	ARTICLE 29.
14	LAW CHANGES	
; თ	EXHIBITS AND ATTACHMENTS	Ш
<del>.</del>	NO WAIVER	ARTICLE 26.
သ	SEVERABILITY	ARTICLE 25.
သွဲ ပ	AUTHORITY TO EXECUTE	ARTICLE 24.
သ ဂ	KEY PERSONNEL	ARTICLE 23.
ગં દે	NON-DISCRIMINATION PROCEDURES	ARTICLE 22.
₹ i	ASSIGNMENT	<b>ARTICLE 21.</b>
ე i	SUBCONTRACTORS	ARTICLE 20.
3 i	SOLICITATION OF AGREEMENT	ARTICLE 19.
; ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	LEGAL RESTRAINTS AND LIMITATIONS	•
<u>.</u>	INSURANCE	<b>ARTICLE 17.</b>
<u></u>	INDEMNIFICATION	
<u> </u>	DISPUTE RESOLUTION	<b>ARTICLE 15.</b>
3 a	COVENANTS BY THE COUNTY	
3 3	CONSENT TO JURISDICTION, VENUE AND SERVICE	
5	GOVERNING LAW	<b>ARTICLE 12</b>
3 :	NOTICES.	<b>ARTICLE 11</b>
: o o	LIMITATION OF ACTIONS AND LIABILITY	<b>ARTICLE 10</b>
χ •	PATENT AND COPYRIGHT INDEMNIFICATION	Ш
7 0	TERMINATION	ARTICLE 8.
<b>3</b> 3	OR	CONTRACT
c	ASSURANCES, REPRESENTATIONS AND WARRANTIES OF	m
. ת	SOFTWARE LICENSES.	ARTICLE 6.
<u> </u>	ACCEPTANCE AND FINAL ACCEPTANCE	ARTICLE 5.
4	SPECIFICATIONS AND REQUIREMENTS	ARTICLE 4.
	CONTRACTOR'S COMPENSATION AND PAYMENT	ARTICLE 3.
: د د	TIME FOR PERFORMANCE AND COMPLETION	ARTICLE 2.
ມ	SCOPE	ARTICLE 1.
PAGE	<u> </u> -	

- Exhibit 1. SCOPE OF WORK
- Exhibit 2. PROJECT PHASES AND PAYMENT SCHEDULE IAS BASELINE DESCRIPTION SOFTWARE LICENSE
  - Exhibit 3.
- Exhibit 4.
- Exhibit 5.
- Exhibit 6. HARDWARE CONFIGURATION ONGOING MAINTENANCE AND SUPPORT
- Exhibit 7. COUNTY RESPONSIBILITIES

## AGREEMENT FOR SOFTWARE AND PROFESSIONAL SERVICES BETWEEN COLE-LAYER-TRUMBLE COMPANY AND HENRY COUNTY

Ohio, 45406. hereinafter referred to as "Contractor," with offices located at 3199 Klepinger Road, Dayton. the laws of the State of Delaware, and authorized to do business in the State of Indiana. COMPANY, a wholly owned subsidiary of Tyler Technologies Inc., a company formed under State of Indiana, hereinafter referred to as the "County," and COLE. LAYER. TRUMBLE THIS AGREEMENT is made by and between the Henry County, a political subdivision of the

computerized and integrated Real Property System; and the County to retain Contractor to provide software and professional services required for a WHEREAS, the County has determined that it is necessary, expedient and in the best interest of

in the marketplace; and WHEREAS, the County has investigated hardware and software professional services available

WHEREAS, the Contractor submitted a proposal, including scope of services and price; and

covenants herein contained, it is agreed by and between the parties hereto as follows: WITNESSETH: for and in consideration of the foregoing promises and the mutual

### ARTICLE 1. SCOPE

Work) attached hereto (hereinafter referred to as the "Phases"). this Agreement shall proceed in accordance with the Phases described in Exhibit 1 (Scope of services required to customize, tailor, enhance and implement the System. Agreement (hereinafter referred to as the "SYSTEM"). Contractor shall provide the professional Contractor to provide a computerized and integrated Real Property System as set forth in this This Agreement sets forth the terms and conditions pursuant to which the County retains the The performance of

# ARTICLE 2. TIME FOR PERFORMANCE AND COMPLETION

to implement this Agreement, provide for the following: Before beginning any Phase, County's Project Director shall provide Contractor with a written notice to proceed, which written notice shall identify the Phase and may, to the extent necessary

- ۵ Specific deadlines as agreed to in the Project Work Plan, which is described and further or Contractor where completion of the Phase is dependent upon completion of a task by a set forth under Phase A of Exhibit 1, with respect to any task to be performed by County
- Ö Reasonable changes agreed to by Contractor and County's Project Director in the description of the Phase and time for performance which do not materially change this

detailed in this Agreement and attachments hereto, except maintenance and support and any any delays caused by County, Contractor may request, in writing, extension of time beyond the warranty work, shall be completed within 220 days after execution of this Agreement. extensions are required, it is agreed that all services required for the installation of the, as hereto and such extension shall be reasonably granted by the County's Project Director. Unless estimated completion time set forth in Exhibit 2 (Project Phase and Payment Schedule) attached If, at any time, Contractor is delayed in its performance and/or completion of a Phase, including

# ARTICLE 3. CONTRACTOR'S COMPENSATION AND PAYMENT

accordance with the fees specified for each Phase as provided in Exhibit 2 and upon completion of work agreed to by the Contractor and the County within a Phase and acceptance by the County and in accordance with the following: to pay the Contractor a total of up to \$584,100 (FIVE HUNDRED EIGHTY-FOUR agreed to by the Contractor and the County in writing. Payment to Contractor shall be in THOUSAND ONE HUNDRED DOLLARS), based upon the cost those goods and services As compensation for the goods and services to be provided by the Contractor, the County agrees

- item priced within a phase, or a Phase. Contractor shall submit written notification to County upon completion of an activity
- Ġ accepted County shall, in accordance with Article 5, advise Contractor of any work that is not

- Ç acceptance of Phase. Contractor shall submit an invoice to County upon receipt of notification by County for
- Ġ. County shall pay the undisputed amount within thirty (30) days after receipt of an
- O to its other rights and remedies, to suspend, temporarily, further performance of this Failure of the County to make payment when due shall entitle the Contractor, in addition Agreement without liability.
- All disputes over acceptance and payments shall be handled in accordance with the provisions of Article 15.

to the month in which the services were provided. the County that are beyond the scope of this Agreement will be invoiced in the month subsequent Additional compensation that may be due the Contractor as the result of services requested by

# ARTICLE 4. SPECIFICATIONS AND REQUIREMENTS

Contractor covenants and agrees that the System, when complete, shall be in compliance with the specifications and representations attached hereto as Exhibit 3 (IAS Baseline Description) and Specification during Phase A. such additional requirements as developed by County and Contractor in the Functional

# ARTICLE 5. ACCEPTANCE AND FINAL ACCEPTANCE

to comply with the specifications and requirements pursuant to the terms of this Agreement. deemed acceptance of a Phase. Acceptance of a specific request for review shall not relieve shall be deemed accepted, however, such review of the activities within a Phase shall not be within such twenty (20) calendar day period, all work covered by the specific request for review of work that is not accepted. If written notice of any work that is not accepted is not provided subject work. The County shall have a period of twenty (20) calendar days to notify Contractor software provided as part of the System, the Contractor shall provide documents related to the Contractor of any responsibility with respect to any products or services that are defective or fail work in progress for the County's Project Director for approval prior to proceeding on the At intervals appropriate to the progress of the tailoring, enhancement, or development of the

to comply with the specifications and requirements pursuant to the terms of this Agreement covered by the phase shall be deemed accepted. Acceptance of a Phase shall not relieve Contractor of any responsibility with respect to any products or services that are defective or fail that is not accepted is not provided within such twenty (20) calendar day period, all work (20) calendar days to notify contractor of work that is not accepted. If written notice of any work Upon the completion of each of the identified Phases A, the County shall have a period of twenty

four (4) hours of the County's support request. If the error, defect or nonconformity cannot be telephone support in the form of consultation and/or remote diagnostic software support within and test the System. At the completion of Phase M, the County will be provided thirty (30) calendar days to operate During the thirty (30) day period, Contractor shall furnish complete off-site

have given final acceptance for the System. by the Contractor. At the conclusion of the thirty (30) day period, if County has not notified Contractor in writing of any such failure or defect in the System, the County will be deemed to System fails to meet the specifications and requirements provided for in this Agreement during reported errors within five (5) business days of the commencement of on-site service. If the otherwise agreed upon, including implementation of temporary procedures to sustain the Contractor shall provide on-site support service at the beginning of the next business week, or as reported during normal business hours (Monday through Friday, 8:00 a.m. to 6:00 p.m. EST), the thirty (30) day period, County may, at County's option, request modification of the software computerized mass appraisal system. corrected by off-site telephone support within five (5) business days of when the error was first The Contractor shall provide corrective measures for all

## ARTICLE 6. SOFTWARE LICENSES

## A. SYSTEM SOFTWARE

described in Exhibit 4 (Software License), Part A, attached hereto, needed for the operation herein, a Sublicense to use the Oracle Products (RDBMS®) software identified and Contractor shall grant to County, subject to full payment of County's obligations provided

# B. COLE. LAYER. TRUMBLE (IAS) SOFTWARE

- Subject to the terms and conditions hereinafter set forth, Contractor grants to County a non-exclusive, nontransferable license to use the Cole•Layer•Trumble Licensed which the Contractor has licensed to County, together with the right to make such improvements, additions or modifications of the version or versions of the software copies of the software as may be required for County's own internal business business of the County, IAS Source Code, related documentation, and any Exhibit 4 (Software License), Part B, attached hereto, solely in the conduct of the Software, hereinafter referred to as the IAS Software as identified and described in
- 2 any person other than County's employees or agents or Contractor's employees without prior written consent of Contractor. County further agrees not to sell, assign. County understands that the software provided under this Agreement contains trade the software in trust and confidence and will safeguard the software to the same secrets and proprietary information belonging to Contractor. to the County in the case where the Contractor is financially unable to perform Cole•Layer•Trumble Software or any interest therein. Software ownership will pass extent that County safeguards other trade secret information related to its uses lease, license or in any manner encumber, pledge, convey or transfer the County agrees not to disclose, provide or otherwise make available the software to County agrees to hold

## C. OTHER THIRD-PARTY SOFTWARE

license to use Software identified and described in Exhibit 4, attached hereto. All third-Contractor shall, subject to acquisition of any additional Phase of service (A) or part of a Phase, pass to County, subject to full payment of County's obligations provided herein a

party software shall conform to published specifications and representations of the

### ARTICLE 7. ASSURANCES, REPRESENTATIONS AND WARRANTIES OF CONTRACTOR

- b represents to County that Contractor has the right to grant to County the right to use the software without restriction or limitation except as provided herein. Ongoing Maintenance and Support attached hereto as Exhibit 6. Contractor warrants and years after final acceptance of IAS in accordance with the Cole\*Layer\*Trumble Company Contractor agrees to provide application software maintenance for a period of three (3)
- Ġ standards set forth in Exhibit 3 (IAS Baseline Description) and such additional Specification during Phase A. requirements as developed by County and Contractor in the Detailed Functional Contractor warrants to County that the System will operate according to the performance
- ņ Exhibit 6 (Ongoing Maintenance and Support), attached hereto and any extension or this Agreement from the date of acceptance through the maintenance periods provided in Contractor warrants that the System shall operate in accordance with the requirements of renewal thereof.
- ġ software, attached hereto as Exhibit 4. County will have the right to use the sublicensed and represents to County that Contractor is an authorized distributor for the sublicensed herein and in accordance with the provisions set forth in Article 6. Contractor warrants County the right to use all software without restriction or limitation except as provided Contractor warrants and represents to County that Contractor has the right to grant to
- O enhancements or additional software which may be acquired by County so long as Phase M, and shall perform as represented by Contractor with respect to updates, Contractor warrants the software will perform as specified herein upon acceptance of successors or assigns. County continues with a Maintenance Agreement with Contractor or Contractor's

electrical and telecommunications connections as defined in Phase A., Project Work Plan and (v) failure of County to provide an operating environment for the System, including third parties and other events, including force majeure, outside Contractor's reasonable control, misuse or negligent acts, (iv) power failure or surges, lightning, fire, flood, accident, actions of Agreement, (ii) the County's modification or relocation of the System, (iii) the County's abuse, operation, or maintenance instructions or its failure to fulfill its obligations under this caused by: (i) failure by the County to follow Contractor's and the manufacturer's installation, The warranties specified in Article 7 above do not cover damage, defect, malfunctions or failure

WARRANTIES OF ANY TYPE WHETHER EXPRESSED OR IMPLIED, INCLUDING THE FOREGOING WARRANTIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER

WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR

## **ARTICLE 8. TERMINATION**

- whole or in part, the procurement officer may procure similar goods or services in a liable for excess costs incurred in procuring similar goods or services. shall continue performance of the contract to the extent it is not terminated and shall be manner and upon terms deemed appropriate by the procurement officer. The Contractor which there has been delay or other breach of contract. In the event of termination in terminate the Contractor's right to proceed with the contract or a part of the contract as to days or any longer time specified in writing by the procurement officer, the officer may notify the contractor in writing of the delay or non-performance, and if not cured in ten commits any other substantial breach of this contract, the procurement officer may or any extension thereof, otherwise fails to timely satisfy the contract provisions, or with such diligence as will ensure its completion within the time specified in the contract Default. If the Contractor refuses or fails to perform any of the provisions of this contract
- Q action to protect and preserve property in the possession of the Contractor in which the directions from the procurement officer, the Contractor shall take timely and necessary County has an interest. Contractor's Duties. Notwithstanding termination of the contract and subject to any
- Ö excess costs incurred in procuring similar goods and services. of outstanding liens or claims of former lien holders and to reimburse the County for the the procurement officer deems to be necessary to protect the County against loss because be at the contract price. The County may withhold from amounts due the Contractor as Compensation. Payment for completed goods delivered and accepted by the County shall
- the County under the clause entitled in fixed-price contracts, "Termination for the Contract, the delivery schedule shall be revised accordingly, subject to the rights of excusable cause the Contractor's progress and performance would have met the terms of was occasioned by any one or more of the excusable causes, and that, but for the requirements. Upon request of the Contractor, the procurement officer shall ascertain the other sources in sufficient time to permit the Contractor to meet the Contract unless the goods and services to be furnished by the subcontractor were obtainable from causes similar to those set forth above, the Contractor shall not be deemed to be default, enemy; acts of the State and any other governmental body in its sovereign or contractual out of causes including but not limited to the following: acts of God; acts of the public of this contract in accordance with its terms, if the Contractor has notified the Excuse for non-performance or delayed performance. Except with respect to defaults of subcontractors, the contract shall not be in default by reason of any failure in performance facts and extent of the failure, and, if the officer determines that any failure to perform failure of a subcontractor to perform or to make progress, and if the failure arises out of freight embargoes; or unusually severe weather. If the failure to perform is caused by the capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes; procurement officer within fifteen days after the cause of the delay and the failure arises

paragraph, the term "subcontractor" means subcontractor at any tier. Convenience" and in cost-reimbursement contracts, "Termination". As used in this

addition to any other rights and remedies provided by law. Additional rights and remedies. The rights and remedies provided in this contract are in

# ARTICLE 9. PATENT AND COPYRIGHT INDEMNIFICATION

- of County excluded under @ below and the matter is finally settled (with the consent of within ten (10) days of receipt of notice of such claim and is given information, suit or proceeding brought against County by a third party arising out of, or relating to, below, then Contractor shall pay all costs incurred by County in defending such claim, that such infringement did not arise as a result of any action of County covered under c in any suit or proceeding in which it is alleged that the infringement is based upon actions reasonable assistance and sole authority to defend or settle the claim. Provided, however, County's own internal use of the Software provided that Contractor is given written notice Contractor shall defend or settle any PATENT AND COPYRIGHT INFRINGEMENT including reasonable attorneys' fees. Contractor) or held by a court of competent jurisdiction, including appellate proceedings
- if such remedies are not reasonably available, grant County a refund for the equipment or or modify the equipment or Licensed Software involved so it becomes non-infringing; or Contractor, at its option, may obtain for County the right to continue using or to replace infringing product. Licensed Software provided pursuant to this Agreement and accept the return of the

software (other than as installed by Contractor) including tailoring, customizing modifications or enhancements provided by Contractor to conform to the Detailed Functional Specification or from modifications, enhancements or changes not provided violation is based upon the use of the Software in combination with other hardware or Contractor shall have no obligation under this Section if the alleged infringement or

EQUIPMENT OR ANY PORTIONS THEREOF COPYRIGHT PROTECTION INFRINGEMENT BY THE LICENSED SOFTWARE OR THE THIS ARTICLE STATES THE ENTIRE LIABILITY OF CONTRACTOR FOR PATENT OR

# ARTICLE 10. LIMITATION OF ACTIONS AND LIABILITY

- ameliorate the Force Majeure and its adverse effects on this Agreement, and to of the Force Majeure and any known prospects for overcoming or ameliorating it. event of Force Majeure causing the delay or failure and discussing the likely duration reason for the delay or failure to perform, describing in as much detail as possible the by Force Majeure, that party shall immediately notify the other party in writing of the resume performance as completely as is reasonably possible once the Force Majeure Both parties agree to take any commercially reasonable measures to overcome or If either party is prevented or delayed in the performance of its obligations hereunder is overcome or ameliorated
- any loss of profits, consequential, incidental, indirect or special damages under any the negligent acts, errors or omissions of Contractor or its officers, agents and employees the amount of direct damages to real or personal property and personal injury caused by circumstances even if Contractor has been advised of the possibility of same except for In no event shall Contractor or its officers, agents and employees be liable to County for
- 9 or form of action shall not exceed twice the total amount paid by County to Contractor property or personal injury and as provided under b. above), under any theory of liability In any event, Contractor's liability for damages, (except for damage to real or personal under this Agreement.
- This Article 10 shall survive the failure of any exclusive remedy.

### ARTICLE 11. NOTICES

addresses set forth above or to such other address as the party to receive the notice has designated All notices required or permitted to be given by one party to the other under this Agreement shall be sufficient if sent by Certified Mail, Return Receipt Requested, to the parties at the respective by written notice to the other party.

Notices to the County shall be to the attention of:

Ms. Jodie Brown Henry County Assessor 101 South Main St., Courthouse New Castle, IN 47362

Notices to Contractor shall be to the attention of:

Cole•Layer•Trumble Company 3199 Klepinger Road Dayton, Ohio 45406

## ARTICLE 12. GOVERNING LAW

This Agreement shall be governed by and construed under the laws of the State of Indiana.

# ARTICLE 13. CONSENT TO JURISDICTION, VENUE AND SERVICE

court actions commenced in Indiana shall be transferred or removed to any other State or Federal consents and agrees venue for state court proceedings shall be in Henry County, Indiana, and no Agreement shall be maintained in courts sitting within the State of Indiana. Contractor further Contractor consents and agrees that all legal proceedings related to the subject matter of this

## ARTICLE 14. COVENANTS BY THE COUNTY

The County hereby covenants and agrees:

- shall have the authority to transmit instructions, receive information, interpret and define the Contract Coordinator. The County reserves the right to designate a different Contract designate another employee or Contractor of the Henry County to serve in the absence of the policy of the County and make decisions pertinent to services covered by this to be performed by Contractor pursuant to this Agreement. The County's Coordinator Agreement. The County's Coordinator shall have the right, from time to time, to Ms. Brown is hereby appointed as the County's Coordinator with respect to the services Coordinator, provided that Contractor is given written notice thereof.
- Ġ reasonably be required by Contractor for the performance of this Agreement. work available and accessible for use by Contractor during normal working hours as may To make such facilities and properties as are reasonably necessary for the performance of

- C the County as may be reasonably required in connection with the work under this County's equipment and personnel. Agreement. The tests to be performed must be within the ability and capability of the To perform at no cost to Contractor such tests of equipment, machinery and facilities of
- Ġ aware of any defect in the performance of work under this Agreement To give prompt notice to Contractor whenever the County observes or otherwise becomes
- O Contractor and to respond in a timely manner so as not to unduly delay Contractor's work called for by this Agreement. To give careful and reasonable consideration to the findings and recommendations of

## ARTICLE 15. DISPUTE RESOLUTION

payment to Contractor of any amount determined to be due and owing. County shall, as promptly as reasonably possible after resolution of such dispute, forward approved by the County Director of Purchasing. If such dispute involves a payment due, the payment in excess of the amount established under this Agreement, will not be final until by County's Coordinator, constituting a material change in this Agreement or providing for the dispute in writing to the Henry County's Project Director. Any dispute resolution agreed to Contractor shall at or after the end of the seven (7) day period submit its claim with the basis for in this Agreement after written notice and if not resolved by such designees after seven (7) days, Disputes shall be resolved as follows: through good faith negotiations by the designees identified

litigation in accordance with the laws of Indiana with venue in the Henry County. Any dispute not resolved in accordance with this Article 15 may be resolved by recourse to

## ARTICLE 16. INDEMNIFICATION

which the County is free from negligence on the part of itself, its employees and agents. or omission of the Contractor, its agents, or employees and with respect to the degree to injury or property damage brought or recovered against it by reason of any negligent action every kind and description arising out of the performance of this Agreement, for personal employees against all claims, demands, payments, suits, actions, recovery, and judgments of The Contractor agrees to defend and save harmless the County, its officers, agents and

including, but not limited to, loss of tax revenue or claims related to valuation of property, whether based in contract, negligence, strict liability or otherwise. Neither party shall be liable to the other for consequential, indirect or incidental damages,

## ARTICLE 17. INSURANCE

amounts of insurance (inclusive of any amounts provided by an umbrella or excess policy): insurance under this section. Contractor shall obtain, at its expense, the following minimum Contractor will not commence work under this Agreement until Contractor has obtained all

protection for bodily injury and property damage with a combined single limit of \$1,000,000 and The Company shall carry Public Liability Insurance in the amount of \$1,000,000 including

\$500,000 for each occurrence naming the County as the additional insured

provide employer's liability insurance in the amount of \$100,000. per occurrence, and the Company shall provide Workers' Compensation Insurance. The Workers' Compensation Insurance shall provide coverage under the Compensation Act of Indiana and shall The Company shall also maintain Automobile Liability Insurance providing limits of \$1,000,000

do business within the State of Indiana Certificates of Insurance shall be supplied to the Director of Procurement of Henry County by the Company detailing the above coverages. These certificates will be issued by a carrier authorized to

# ARTICLE 18. LEGAL RESTRAINTS AND LIMITATIONS

of federal, state, regional and certain local governmental agencies or authorities. Contractor imposed or administered pursuant to numerous applicable laws, ordinances, rules and regulations provisions of this Agreement shall be in compliance therewith. agrees that all professional services rendered or performed by Contractor pursuant to the subdivision of the State of Indiana, is subject to restraints, limitations, regulations, and controls Contractor acknowledges that the County, as a unit of local government and a political

## ARTICLE 19. SOLICITATION OF AGREEMENT

otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift or without liability or at its discretion to deduct from the Agreement price or consideration or other consideration contingent upon or resulting from the award or making of this Agreement solely for Contractor, any fee, commission, percentage, brokerage fee, gift, contingent fee or any has not paid or agreed to pay any company or person other than bona fide employee working For breach or violation of this warranty, the County shall have the right to annul this Agreement bona fide employee working solely for Contractor to solicit or secure this Agreement, and that it Contractor warrants that it has not employed or retained any company or person other than a

## ARTICLE 20. SUBCONTRACTORS

obligate the County to the payment of any compensation to the subcontractor or additional any liability or responsibility to the County pursuant to the provisions of this Agreement or required by this Agreement; however, should Contractor find it necessary to utilize the services compensation to Contractor. Agreement. The utilization of any subcontractor by Contractor shall not relieve Contractor from Contractor shall also require each subcontractor to adhere to applicable provisions of this of additional subcontractors, Contractor shall first obtain the written approval of the County. It is expected that Contractor shall have standard in-house capability to provide all the services

## ARTICLE 21. ASSIGNMENT

unless the other party shall first give its written consent to such assignment. The performance of the Agreement by Contractor is the essence of this Agreement. No assignment of this Agreement or any right or interest herein by either party shall be effective

# ARTICLE 22. NON-DISCRIMINATION PROCEDURES

During the performance of this Agreement, Contractor agrees as follows:

- ы action will be taken with reference to, but shall not be limited to, recruitment, without discrimination because of race, creed, sex, color, national origin or age. to insure that all employees and applicants are afforded equal employment opportunities training). termination, rates of training or retraining (including apprenticeship and on-the-job employment, job assignment, promotion, upgrading, demotion, transfer, layoff or because of race, creed, sex, color, national origin or age, and will take affirmative action Contractor will not discriminate against any employee or applicant for employment
- Ġ to discrimination in the performance of this Agreement. origin or age, be excluded from participation in, be denied the proceeds of, or be subject No person in the United States shall, on the grounds of race, creed, sex, color, national

## ARTICLE 23. KEY PERSONNEL

by the County. Such approval shall not be unreasonably withheld. removed from the project until alternate personnel acceptable to County are approved in writing The following Key personnel are hereby assigned to the project by Contractor and shall not be

Contractor Project Manager: Jerry Fansher
System Development: Howard Helis

System Manager:

County Project Manager: Jodie Brown (Also, County Coordinator & Project

Elaine Hall

Director)

## ARTICLE 24. AUTHORITY TO EXECUTE

this Agreement, that the governing or managing body of each of these parties has approved this execution of this Agreement in the manner hereinafter set forth. Agreement and that the governing or managing body of each of the parties has authorized the Each of the parties hereto covenants to the other party that it has lawful authority to enter into

## ARTICLE 25. SEVERABILITY

of the remaining provisions shall not be impaired thereby If any provision of this Agreement is held invalid or otherwise unenforceable, the enforceability

## ARTICLE 26. NO WAIVER

any right hereunder. The failure by any party to exercise any right provided for herein shall not be deemed a waiver of

## ARTICLE 27. EXHIBITS AND ATTACHMENTS

this Agreement. The documents listed below have been attached hereto and are incorporated herein as a part of

7	4 10 /	ω γ		Exhibit Number
Ongoing Maintenance and Support County Responsibilities	Software License Hardware Configuration	Project Phase and Payment Schedule IAS Baseline Description	Scope of Work	Document Title

## ARTICLE 28. LAW CHANGES

The Company agrees to make changes to IAS resulting from future Indiana State or County law changes, for a to-be-determined additional fee.

change. The Company further agrees to write, test and install all necessary modifications to IAS for law changes initiated by the Henry County Council within a to-be-determined period of time, said period of time to be mutually agreed upon by the Company and County at the time of the law

## ARTICLE 29. NON-SOLICITATION

express written consent of the Company. During the Period of Agreement and for a period of six months following the project completion date, the Jurisdiction will not solicit for employment or hire any Company employee without the

TIAA COCTATIIAA NI	my withing withing, me parties hereto have executed this Agreement, effective this	
DATE MA	4	
d day or	, 2002, by and between the day and year first above	

HENRY COUNTY, INDIANA

BY:

TITLE:

COLE-LAYER-TRUMBLE COMPANY

BY: Tony" Henderson
Assistant Vice President, Marketing

## **EXHIBIT 1 – SCOPE OF WORK**

## PHASE A: PLANNING AND FUNCTIONAL REQUIREMENTS:

# License Fees, Oracle Run Time License and Oracle Technical Support:

signing by the County. Specified portions of the license fees cover Oracle run time licensing for the various IAS modules. License Fees for IAS and the first year Oracle Technical Support fee are billed upon contract

### Project Start-Up

staffing and assignment of key staff, procurement of resources needed to internally support the execution of project tasks. Contractor will execute project start up tasks including internal project planning, project

### **Project Work Plan**

detailed planning calendar or Project Work Plan, with County staff. The Project Work Plan will expand upon the delineation of tasks identified in this Scope of Work, indicating becomes available from the various defining project tasks. responsible parties, estimated effort, projected time frames and task dependencies. This Work Plan will be revised during the initial phases of the contract as the additional information Contractor shall meet with County within thirty (30) days of contract signing to review

## Deliverable: Project Work Plan

**System Implementation Timetable** A key factor in preparing the project work plan is the System Implementation Timetable which will delineate the system functions which need to be provided on a staged basis to support the production of year 2002 valuations and associated year 2003 tax bills. This System Implementation Timetable will set the priorities for delivery of IAS.

## **Functional Project Requirements**

addressed in the Functional Specification. Integrated Assessment System (IAS). needed to facilitate definition of the tasks involved in the installation and testing of the Contractor will provide a high level Functional Specification that will include information Listed below are elements that shall be included and

Deliverable: Written Functional Specifications

## Software Modules to be Included:

Integrated Assessment System - includes Computer Assisted Mass Appraisal (CAMA), users indicated in Exhibit 4 - Software Licenses Hearing Tracking (HT), and Personal Property (PP) modules for the number of concurrent Assessment Administration (AA), Tax Billing and Collection (TB&C), Delinquencies (DEL),

# Common Customization to be made to IAS by Contractor

attend these walkthroughs and work together to identify modifications to IAS that will benefit the County's facilities. It is intended that the County Assessor, Auditor, and Treasurer will the County The County will participate in Detailed System Walkthroughs to be held by the Contractor at

# Site Specific Modifications to be made to Base IAS by Contractor:

other systems, as a result of the detailed system walkthrough. The Contractor will produce an the list of changes and direct the Contractor as to which changes the County wants made. The estimate of the development effort in hours for each candidate change. The County will review Contractor will use the hours in the Site Specific Customization to make the requested changes The Contractor and County will identify candidate IAS modifications, including interfaces to

## **Data Conversion Definitions:**

County's present data for converting into the new system conversion data elements so that the County can provide Contractor with an acceptable file of County and Contractor will review, determine and define CAMA, AA, TB&C, and DEL

## Data Conversion Programming:

a conversion file in the specified format to be used as input to the loader scripts The Contractor will write the necessary loader scripts' to load the converted CAMA, AA, TB&C, and DEL data for the County. The County will write the necessary programs to create

## Phased Installation and Acceptance Testing:

testing and acceptance testing of IAS in accordance with the system implementation timetable. The Contractor will stage the installation of the modified IAS system to facilitate conversion

### User Training:

developed in conjunction with the Phase A work plan, subject to refinement as provided for in conjunction with the installation of the modified IAS system. A general training plan will be The Contractor will provide four (4) weeks of on-site user training in the operation of IAS in

properly coordinated for timely implementation of the required functions priorities for the different system and project elements so that the project work-plan tasks can be The above items will be addressed at a relatively high level, but in sufficient detail to identify the

# SITE PREPARATION AND HARDWARE INSTALLATION:

operating system software, and network to support the County Assessor, Auditor, and Treasurer's The Contractor will work with the County to determine the necessary servers, workstations,

### IAS SERVER

The County will provide the hardware and operating system software required to run IAS and the other purchased applications as detailed in Exhibit 5.

installation of the hardware The County will make the necessary site preparations and arrangements for receipt and

# BASE SYSTEM INSTALLATION AND WALK THROUGH

### Install IAS Release 4.0:

requirements. defining the Detailed System Specifications and determining the detailed conversion delayed) to be used to conduct a detailed system walk through as a point of reference for Phase B (or alternate hardware to be provided by the County, should hardware installation be The Contractor will install its current release of IAS (IAS 4.0) on the designated hardware in

Deliverable: County Performance of IAS Module Checklist

### System Walk Through

system operations and data files and the treatment of Assessor, Auditor, and Treasurer the IAS modules. During these walk-throughs the Contractor and County will review current functions within IAS 4.0. Contractor and County staff will meet for a series of walk-throughs of various components of

Deliverable: The notes from the walk-through

### **Scope Definition**

incorporated into Conversion Specification and Detailed Modification Requirements. The notes from the walk-through will be published for Contractor and County review and

County in conjunction with the implementation effort will develop. During this review the Contractor and County will identify reports and other outputs which the

Deliverable: Draft Modification Requirements

The IAS 4.0 software will be available for the County's use in testing conversion programs and developing various reports and other outputs assigned to the County, until modified code is delivered in accordance with the scheduled delivery of Phase F IAS Modifications and Phase G System Acceptance

### PHASE D: CONVERSION

## Data Conversion Definitions:

elements. The County will work to provide the Contractor with an acceptable file of Henry County's present data for converting into the new system Contractor will review, determine, and define CAMA, AA, TB&C, and DEL conversion data Based upon the walkthrough in Phase C and follow-up discussion with the County, the

Deliverable: Written Data Conversion Definitions

## Implementation Parameters:

or instructions to the County for setting up the various reference tables used by IAS, including In additional to reviewing the parcel level data, the Contractor will provide specifications and cost tables, land pricing tables, and various edit tables.

Data Conversion Programming:

Contractor will provide the necessary 'loader scripts' to load the converted CAMA, AA, TB&C, and DEL data for the County.

# Conversion Assistance in Testing and Loading of Data Files:

Quality control and verification of data is responsibility of the County, with Contractor Contractor will assist the County in loading converted data for the various IAS modules

- Contractor and County will load existing Real Property data into IAS structure
- Contractor and County will conduct Data Load Test with various reports for validation

# Final Conversion and Loading of Data Files in Conjunction with Phased Implementation:

responsibility of County. the phased System Implementation Timetable. Quality control and verification of data is then current County CAMA, AA, TB&C, or DEL data into the IAS table structure, based upon Following the conclusion of testing in each phase, the County shall re-extract, convert and load

- Contractor will assist the County in loading existing data into IAS structure.
- reports for validation Contractor will assist the County in conducting the final Data Load Test with various

# CAMA, AA, TB&C, DEL, HT, and PP Detailed Functional Specifications:

## Modification Specifications:

subsequent discussion with the County, develop detailed system modification specifications for each of the IAS modules. The Contractor will, based upon the information gathered during the system walk-through and

effort for the modifications. In conjunction with this effort the Contractor will provide firm estimates of the programming

The County will develop specifications for the various reports and other outputs, which have been identified as its responsibility in conjunction with the system walk-through

Deliverable: Detailed Functional Specifications

## Sign-Off on Modification Specification

The County will review and sign-off on the detailed specifications developed by the Contractor basis for the Contractor's modification effort. within 15 days of delivery (by module or sub-module). The approved specifications will be the

## PHASE F: CAMA, AA, TB&C, DEL, HT, and PP Modifications.

### **Programming Supervision:**

the modifications with the system test, conversion and implementation plans subsystems as well as the extent of the modifications and the coordination of the completion of code. Scheduling of the modifications will take into account the release plans for the various Release plan to facilitate the baselining of as many of the modifications as are reasonably feasible and mutually agreed to, minimizing the ongoing support issues relative to custom The Contractor will integrate the County modification requirements into its overall IAS

### System Test Plan:

direction for County staff in testing IAS during the phased installation and acceptance process Deliverable: Written System Test Plan Contractor staff in testing the modifications as part of the effort in this Phase as well as The Contractor will develop an outline for system testing which provides guidance for

## **Programming Modifications:**

modules in accordance with approved modification specifications Contractor shall make necessary modifications to the CAMA, AA, TB&C, DEL, HT, and PP

### System Testing:

accordance with the system test plan above Contractor will perform tests of the various IAS modules as the modifications are completed in

Billing based on percent complete.

## User Documentation Updates:

which are developed as part of this modification effort. Contractor will review and update current IAS documentation to reflect the modifications

Deliverable: Revised documentation

## PHASE G: SYSTEM ACCEPTANCE:

## Phased Installation and Beta Testing:

hardware for testing by County staff and use in conjunction with the development of various County reports. As the various modules of IAS are completed and tested, they will be installed on the County

and County shall conduct Data Load Test with various reports for validation. The County will execute various system tests in accordance with the system test plan. The County shall load converted data for IAS CAMA, AA, TB&C, and DEL data. Contractor

Payable upon successful completion for the beta test for each module.

### Final System Acceptance:

system testing. Preliminary modules (impacted by subsequent deliveries and updates) will be flagged as conditional sign-off, pending testing of the final deliverables. The County will sign off on the delivered system upon successful completion of integrated

Payable upon successful completion of the Acceptance test.

# PHASE H: IAS DOCUMENTATION AND TRAINING

### Delivery of Documentation:

documentation and training manuals in various formats for the operation and maintenance of Prior to the Acceptance tests (Phase G), Contractor shall deliver to the County system the system. Such documentation shall include:

- machine-readable format. County. The Contractor will also furnish one (1) copy of the IAS User's Manual in Manual. This manual will be tailored to document the appropriate modules purchased by Up to one copy per ten (10) concurrent users of the applicable sections of the IAS User's
- 5 Contractor's statement of copyright be included on each copy. documentation and training materials for training of other internal uses provided that the The County may photocopy or otherwise reproduce Contractor's copyrighted

## County Personnel Training:

total weeks of training sessions through the phased installation and implementation period the staff to be trained and general topics to be covered over the course of a series of six (6) Contractor shall develop a training plan in conjunction with the County that establishes

### For each session:

- 1 place. select the appropriate options, and the training sessions will proceed with these options in system level options that should be decided prior to the training session. The Contractor shall prepare and review with County a pre-training report identifying any The County shall
- 'n The Contractor shall provide on-site training for the specified days for staff designated by the County.

Billing to be based on percent complete, billable at completion of each session.

## PHASE I: PROJECT MANAGEMENT

### Project Administration:

Contractor shall develop and maintain a project work plan and schedule over the course of the project. This plan will detail Contractor and County responsibilities, tasks, planned, revised and actual execution dates. The Contractor will submit status reports at least monthly.

### Project Management:

sessions, following up with Contractor staff and County on respective commitments. coordination of County and Contractor resource needs in scheduling meetings, review Contractor shall provide day to day management of the project activities including

## PHASE J: ONGOING SUPPORT

#### IAS Support:

and urgency of the reported problem, the Contractor shall take steps to have the appropriate permanent solution can be implemented as described in Exhibit 6 support personnel work the issue(s) and provide timely work-arounds or temporary fix until a to the support desk will be returned within four (4) working hours. In response to the nature provides for unlimited hot-line 8am to 6pm EST through our Dayton based support desk. Calls IAS Support begins upon installation of the base IAS US4 release at the County. This support

services on a Time and Materials basis. related code developed by the County and to provide additional off-site and on-site support This IAS Support is designed to provide warranty coverage for the base IAS product and Contractor developed and supported custom code. The Contractor is available to support

IAS Users' Group. There are four registrations, 4 roundtrip airfare tickets (coach), and 4 standard hotel rooms (3 nights each) included in this contract for the 2003, 2004, and 2005 IAS IAS Support also provides the County access to additional IAS releases and membership in the Users Conference.

IAS Support Fees are due annually upon the anniversary date of the initial support. This contract provides for IAS support through December 31, 2005.

### Oracle Technical Support:

Fee is due annually to Oracle upon contract anniversary date in order to access Oracle Technical Support and receive phone support from CLT, corrections and new releases This contract provides for Oracle Technical support through December 31, 2005

A. C. C. Standard Edition A. C. C. Strong C. S	PRE   BILLE	PHASE 8 - Project Management & Administration	Conduct Closeout/Transition Meeting	Obtain Client Sign-off on Final System	PHASE 7 - Project Closeout & Transition to S	Cities of the City of Constitute	Onsite Support at Startup	IAS Training 4 Weeks	PHASE 6 - Documentation and Training					Ċ		CAMA,AA,TB&C,DEL	PHASE 5 - Data Conversion	Collinercial Revaluation Data	Commondial Description Data Pate	Cost Table Setups			P		CAMA,AA,TB&C,DEL,HT,PP	PHASE 4 - Setup & Configurations, Modifications, Testing	Tune Database - Post Conversion	Final Install of IAS	Train Client DBA in Oracle	Install Oracle & Initial IAS	PHASE 3 - Hardware & Software Installation		Provide Hardwars/Softwars Re	Document IAS Satis Daramete	Evaluate Business Process & Reconcile GAP	Conduct Detailed GAP Analysis	PHASE 2 - Requirements and Specification Validation	- FORGOT FROM I INC.	Project Work Plan								1	PHASE 1 - Project Startup and Planning	PROJECT ACTIVITY	_
		ation	eeting	System Test	Support						inal Production Conversion	ystem Table Setup	Conversion Testing & Data Verification	Conversion Programming & Execution	Vrite Conversion Specifications & Scripts			chuy		poate Documentation	Init Test Modifications & Module	Andify System	roduce Design & Programming Specs	Refine Setup Parameters from Phase 2	8	ions Testing	50					***************************************	commendation		Reconcile GAP	5	/alldation			AS-FIX	AS-PP	AS-HT	AS-DEL	AS-TB&C	AS-AA	AS-CAMA	Imale I Inprop - Clandard Edition			_
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PHASE 9 - User Conference Registration Registration Airfare Coach, 1 Standard Hotel Room for 3 nights for the 2003, 2004 & 2005 (AS National Users Conference Conference PHASE 10 - Oracle Annual Technical Support (Through 12/31/05) CILT commits to no more than a 5% (Through 12/31/05) Fees for a period from January 1, 2006 through December 31, 2008)  PHASE 11 - IAS Annual Technical Support (CILT commits to no more than a 5% (Through 12/31/05) CILT commits to no more than a 5% (Through 12/31/05) CILT commits to no more than a 5% (Through 12/31/05) CILT commits to no more than a 5% (Through 12/31/05) CILT commits to no more than a 5% (Through 12/31/05) CILT commits to no more than a 5% (Through 12/31/05) CILT commits to no more than a 5% (Through 12/31/05) CILT commits to no more than a 5% (Through 12/31/05) CILT commits to no more than a 5% (Through 12/31/05) CILT commits to no more than a 5% (CILT commits to no mor		_				
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(1 Person Registration, 1 Roundtrip Airfare Coach, 1 Standard Hotel Room for 3 nights for the 2003, 2004 & 2005 IAS National Users Conference	Annual	\$18,630		port (Through 12/31/05)	Oracle Annual Technical Sup	PHASE 10 -
(1 Person Registration, 1 Roundtrip Airfaire Coach, 1 Standard Hotel Room for 3 nights for the 2003, 2004 & 2005 IAS National Users Conference						
	Deliverable	\$3,900	dtrip       2004	(1 Person Registration, 1 Round Airfare Coach, 1 Standard Hotel Room for 3 nights for the 2003; & 2005 IAS National Users Conference	User Conference Registration	PHASE 9 -

### TABLE OF CONTENTS

INTRODUCTION	
Can IAS easily adapt to new laws?	laws?
SYSTEM OVERVIEW	»·····································
System Features	3
Mass Appraisa	praisal (CAMA)
Assessment Administration (AA)	4.4.)
Tax Billing & Collection (TX)	7
Hearing Tracking (HT)	5
Delinquent Tax (DQ)	5
Manufactured Homes (MH)	s
SYSTEM ARCHITECTURE	9
SOFTWARE ARCHITECTURE	
Programming Languages	y 1
Calculations	6
Data Organization	······································
Future Growth and Scalability	ty6
Structure	7
Objects Containing Data	7
Objects Containing Rules	9
LAS Objects Outside the Database	abase10
Dependencies	10
Relationships Between Tables	***************************************
Processing Options	10
User-Defined Fields/ Calculations	
IAS MODULES	
COMPUTER ASSISTED MASS APPRAISAL (CAM	PRAISAL (CAMA) MODULE13
CAMA General Description	
CAMA Data Management	
DEBCOMAT DECORPRY (DD)	72
Purpose.	23
Personal Property General Description	Description23
Data Mo	ragement
	27
ASSESSMENT ADMINISTRATION (AA)	(AA)
Purpose	
ent Administration General	Feneral Description25
Data Mc	Data Management30
	Reports
LAX BILLING/ LAX COLLECTION MODULE (1X)	MODULE (1X)
Tax Billing and Collection General Description	ineral Description
7	

	ONCY TICYON
45	Manufactured Homes Related Reports45
45	Manufactured Homes Data Management45
44	Manufactured Homes General Description44
44	Pupose 44
44	MANUFACTURED HOMES (MH)
43	Delinquent Processing Related Reports
41	Š
41	Purpose
41	DELINQUENT PROCESSING (DQ)41
40	Hearing Tracking Related Reports 40
40	Hearing Tracking Data Management 40
39	Hearing Tracking General Description39
39	Pwpose39
39	HEARING TRACKING (HT)
38	Tax Billing and Collection Related Reports38
37	Figure 2: Tax Billing and Collection Data Flow
34	Tax Rates

### INTRODUCTION

of these modules can incorporate sub-modules that will assist your Jurisdiction in proper data maintenance. The seven main modules are discussed in this document. Mass Appraisal (CAMA), Assessment Administration (AA), Personal Property (PP), Tax Billing and This document is a Baseline Description of the Integrated Assessment System 4.0 (IAS). The following pages will provide some background on how IAS maintains data associated with property assessment and Collection (TBC), Hearing Tracking (HT), Delinquent Tax (DQ), and Manufactured Homes (MH). Each taxation. IAS is a fully integrated computer system that contains seven main modules: Computer Assisted

## The sections in this document include:

- System Overview This is a brief description of the system and each module
- System Architecture This section describes what type of database the system is built upon and how that database is used to calculate data
- IAS Modules This section describes how the seven main modules are used in the overall property assessment and taxation process. Each section also contains brief descriptions of the major reports associated with each module.

The face of property appraisal for the purpose of taxation has changed over the years and Cole Layer Trumble (CLT) has changed with the times. Since 1939, CLT has been involved in property appraisals throughout the United States and Canada. What started out as a property appraisal firm has grown to become a leader in the computer technology associated with property tax administration.

that can keep up with local Jurisdiction needs. As more housing developments pop up each year, and taxation laws change, it is hard to find software

has the ability to support the following Property Classes and Property Tax functions: administration software package available to the local governments in the United States and Canada. IAS Originally developed in 1989, the latest release of IAS has evolved into the most complete property tax

### Property Class (Type)

- Residential
- Agricultural
- Commercial
- Industrial
- Natural Resources
- Tangible Personal Property
- Motor Vehicles
- Manufactured Homes

### Property Tax Function

- Assessment Administration
- Computer Assisted Mass Appraisal
- Tax Billing & Collection
- Delinquent Taxes
- Hearing (Protest) Tracking
- Tax Extension
- Conveyance
- Estate Tax

## Can IAS easily adapt to new laws?

county employees did the actual implementation within a week. No programming changes were required This is just one example of the flexibility of IAS. made to the IAS parameters for the 2001 tax year (the old rules remained in place for earlier years). Two implementation using the baseline IAS product. After a discussion, the client chose one. Changes were that the IAS client had to implement a major change to its assessment processing within a few months. The law, like most property tax laws, was complex in the details of how the rules were applied. Jean Hostetler, a CLT business analyst, read the materials provided by the client and presented two options for for residential use parcels (including commercial buildings such as apartment complexes). In 2000, a Western state passed a law that limited the amount an assessed value could increase in a year This meant

How does IAS work in the everyday processing of data associated with property appraisal? What valuation approaches are supported by IAS? Does it keep a history of the parcel? Can it handle personal property valuation? How are tax bills handled? This document will answer these and other questions.

### SYSTEM OVERVIEW

relational database platform. The Integrated Assessment System (IAS) is a software solution designed to meet the needs of the property tax function of local and state governments. It is modular in design and is built upon the ORACLE®

IAS is organized in the modules shown below:

The Modular Structure of IAS

#### Manufactured Property Persona Homes Collection Billing & Tax Administration Assessment CAMA Delinguent Tracking Hearing Tax

Figure 1. IAS Structure

### System Features

modules and their capabilities. accommodate very large volume database and user requests. The following is a brief description of the meet the Jurisdiction's terminology and office procedures. The Oracle database also has the ability to complete Graphic User Interface. developed using Oracle Developer 2000® tools. The user has the ability to easily access all data elements within the application database via various screens or report writing capabilities. The application has a All modules are tightly integrated through the common Oracle relational database and have been The online menus and drop down menus can be customized per site to

## Computer Assisted Mass Appraisal (CAMA)

determining the assessed values used in calculating taxes. CAMA provides a variety of reports required and ease of use. CAMA supports classification of properties, land and improvements, for purposes of comparable sales) and income, using valuation tables and algorithms which offer the appraiser flexibility estimates are developed. It supports the three approaches to value: cost, sales comparison (regression and for reviewing individual properties and assessing the performance of the valuation and review efforts This portion of the system maintains a database of property characteristics from which appraised value

age, or income use values and tracking both market and use value on each parcel. value and classified use. This subsystem provides the mechanism for applying use value tables or crop, Within CAMA is a Classified Use Valuation subsystem. Land is appraised on the basis of its fair market

### Personal Property (PP)

taxpayers, the computation of an assessed value, and, in case of failure to report, a mechanism for forced verifying the reasonableness of a return. valuation of the property. The Personal Property module also provides auditing features to assist users in AA information, Personal Property facilitates the receipt and processing of property returns from Administration (AA) account records, but it can also function as a stand-alone system. In addition to the The Personal Property valuation module interfaces with other IAS modules by sharing Assessmen

## Assessment Administration (AA)

used to extend taxes in the Tax Billing and Collection module of IAS. information residing in the Assessment Administration module is the primary source of value information in a jurisdiction and the total assessed, exempt, and net taxable values residing in that jurisdiction. The Manufactured Homes and Livestock. The module produces the assessment roll which lists each property property classification, and appraised and/or assessed value(s) for properties maintained in IAS. It may The Assessment Administration module maintains the ownership, mailing address, legal description, include information for Real Estate or Personal Property in addition to other types of property such as

## Tax Billing & Collection (TX)

the module. or other forms of mass payment entities can be processed using batch payment transaction applications in separate cashiering application. In addition, tax payments made through mortgage companies, lock boxes maintained in the Assessment Administration module and jurisdiction rates maintained in the TX module collecting and distributing property taxes. The module extends taxes through the use of values The Tax Billing and Collection module performs the primary functions of extending, maintaining In the TX module, taxes may be paid in real-time through a TX form or by setting up an interface for a

financial applications for general ledger activities. Billing and Collection module. This process allows for the interface of fund distribution to separate The distribution of collected property tax funds to individual jurisdictions is a major function of the Tax

### Hearing Tracking (HT)

module allows the user to define the hearing process for a particular Jurisdiction. The Hearing Tracking module tracks the scheduling and disposition of properties being appealed. The hearing process can be defined by Jurisdiction to support multiple levels of appeal. The Hearing Tracking

### Delinquent Tax (DQ)

The Delinquent Tax module is used to maintain delinquent property tax accounts. The module tracks and maintains functions such as payment processes, calculation of interest, bankruptcy, and foreclosure.

## Manufactured Homes (MH)

other identifying and descriptive data. maintenance of data, including the Parcel ID of the associated land, make, model, serial number, and valued as either Real Property or Personal Property. The Manufactured Homes module allows The Manufactured Homes module allows the Jurisdiction to maintain and track manufactured homes

### SYSTEM ARCHITECTURE

### Software Architecture

The essential points of the IAS software architecture are as follows:

## Programming Languages

- Oracle RDBMS
- Developer 2000 for all forms, some reports
- SQLPlus for some reports
- PL/SQL with database engine
- COBOL

#### Calculations

- PL/SQL
- stored as database items
- other sums. If there is a change in an addition, the dwelling value changes accordingly use of objects, e.g, dwelling valuation, in which the dwelling is composed of additions plus

### Data Organization

complete audit trail of user-maintained data. IAS to support an unlimited number of versions of the data within a tax year. years and it can apply different valuation and taxation rules for each year. The capability is also there for IAS is a multi-year and multi-cycle system. IAS has the capability to store an unlimited number of tax This feature provides for a

## Future Growth and Scalability

a Tax Billing and Collection system for the State of Ohio. Since that time, functionality has been added flexibility of IAS have increased such that it is currently installed in over twenty states and one Canadian Manufactured Homes, Natural Resources Valuation, and Hearing Tracking. Enhancements in the to include Computer Assisted Mass Appraisal, Personal Property Administration and Valuation, We believe that IAS is well positioned for future system growth and functional scalability. IAS started as

Oracle is well known for its technical capabilities and the continuous improvement and updating of its product offerings. As Oracle makes advances in technology, they are incorporated into the IAS storage and transaction volume grow, the scalability is available. scalability with respect to database size and transaction volume handling, so as Jurisdiction needs for data architectural scheme when beneficial to the product. The Oracle database engine is known for its

performance improvement that can be achieved by additional servers available to the application One particular aspect of the Oracle 9i database platform that also relates to scalability is the near linear

### Recommended Tools

preclude the use of third party products as long as they are capable of querying the database. reporting tool. Other than that, the functionality of IAS is self-contained. The tool we always recommend with IAS is Oracle's Discoverer Product. That said, there is nothing to It is a user-friendly ad hoc

#### Structure

IAS is designed as an object relational database. The relational description means that the data is stored in tables in a relational database. The object portion means that the business rules relating to the tables are also stored in the database.

and business rules. These map to the things a user of the system sees and does. Object also combine and object that is the combination of objects including the dwelling, land, etc. nest together to produce the complete system. Thus, a dwelling may be an object. A parcel is also an There are two definitions of object. An object is an element of the system that is the combination of data

defined by the Oracle architecture, which can be divided into objects that contain the data and those that contain the rules The second definition for object is the Oracle term for items in the database. These are various types

## **Objects Containing Data**

accessing the data. The type of object that is a combination of data and business rules contains or provides a way of

#### Tables

can be broken into five types: Tables contain all the actual data. They are defined as a group of columns. Columns are sometimes called fields or data items. A row is one set of columns. The whole table is a set of rows. Within IAS the tables

- tables are tied to a parcel. This is the data the system holds and manipulates. New parcels, Data Tables-Data tables contain actual data. These include descriptions and values. Most data data in time. New rates may require new values. dwellings, or whatever may be removed or added. A new tax year may require freezing the old
- conditions require: a revaluation or tax calculation or other change in computed results. Rate Tables-Rate tables contain factors that are used to compute values. These change as
- codes in a table, the meaning of a field, the method of calculation, the rules for calculation, edits of the data, and other things which describe how the system should work Parameter Tables-Parameter tables define the business rules. These define the definition of
- not changed directly by users. The contents are changed by the system as it processes. System Tables-System tables are used by the system to track and do its work. These are usually contain data such as error logs, processing status, and system version information
- information compiled by the process. They usually are used to improve performance Temporary Tables-Temporary tables are used by processes - usually reports - to hold

#### Views

Views are an alternate method of looking at tables. They are actually stored as SQL statements but are accessed like tables. They provide an easier or more efficient way of accessing part of a table or a combination of tables.

#### Synonyms

Synonyms are alternate names for a table or view

#### Snapshots

other databases appears as part of the user's database. They may also be built from complex views to Snapshots are copies of a table or view that are stored as a table. They may be created so that data from improve performance. They need to be refreshed as the data in the tables is changed. Snapshots reference

#### Indexes

same results whether an index exists or not. When an index exists on some columns in the database, index can produce a huge improvement in performance. requested conditions. Without an index, Oracle has to read and examine every row. For some queries, an Oracle can use the index to only look at some of the rows in the table to see which ones meet the Indexes are built to improve performance in reading data from a table. An SQL statement will provide the

Indexes are also used to edit rows for uniqueness. This helps maintain database integrity. Indexes used for this are defined as UNIQUE. In this sense, they are used to enforce business rules. The selection of indexes in IAS is based on our knowledge of the relationships and business rules for the tables.

## **Objects Containing Rules**

Most objects, which define the rules in IAS, contain program code. This code is written in SQL and Oracle's programming language, PL/SQL.

The code reads data and processes it, often to write other data

#### Functions

Functions are program elements that are called, with or without input parameters, and return a single value. They are not used to change any data in the database directly. One characteristic is that they can be called from an SQL statement.

#### Procedures

They may return one or more values as output parameters. They may also update the database Procedures are program elements that are called, with or without input parameters; to perform some logic

procedures are used to maintain the database, They must be executed from a PL/SQL block or from SQL\*PLUS with an EXECUTE statement. Some

#### Packages

efficiently than functions and procedures compiled outside packages. It is also an easier way to manage a large number of those objects. The current release has almost 200,000 lines of PL/SQL code in packages. Packages are bundled groups of functions and procedures. Oracle executes code within packages more

Some IAS packages are used to perform global functions, such as common calculation functions, error processing, and edit processes. Other packages and processes such as batch jobs and forms use these.

rules for modules. Others perform calculations and other functions within modules. These process the individual business edits, pulldown logic, interfaces for the databases for displays, etc. External programs such as forms (screens) use other packages. These handle data manipulation, field

parid id assignment, parcel locking, copying parcel data, etc. Others manage processes that are performed across modules. These include functions such as automatic

body contains the program code. Packages have two parts. The package header defines the functions, procedures, and their parameters. The

#### Triggers

tables. They also may edit the data, call calculations, synchronize the data with other tables, or update insert of a row. They update the maintenance and timestamp information. Triggers are used to version Triggers are routines called when an event happens in the database. The event is usually the update or

#### Sequences

of functions, such as sales history (the salekey), automatic parcel id generation, and payments. Sequences are called to produce the next number in a series. They produce numbers and keys for a variety

## IAS Objects Outside the Database

While the data and rules are stored in the database, there is a need to access this information. This is usually done through software such as screens and reports. These are stored in files outside the database to create the client portion of the system.

common code, icons (\*.ico), logos (\*.tif), and parameter (\*.ini) files. IAS uses other files for the client part of the system. SQL code (\*.sql) is used to create the objects, run reports, and do a variety of other tasks. Some reports are written in Oracle Reports (\*.rdf,\*.rep). Others are COBOL or C and the executable (\*.exe) is provided. Forms (\*.fmx) also require libraries (\*.plx) of

storage and processing of data occurs within the database These programs are stored on a forms and/or reports server. They make calls to the database or interact with each other. The presentation of data from IAS is the primary purpose of these items. The actual

#### Dependencies

Oracle maintains a list of dependencies between objects. This list is consulted whenever an object is recompiled in the database. This insures that as objects are changed related objects remain synchronized. Any problems that may occur will be identified before they impact work done on the system.

## Relationships Between Tables

The primary key of most tables is defined by a unique index. In IAS, these usually are named as the table name followed by \_u. The primary key is also normally the first column on the table. Commonly used foreign keys are given another index.

referred to as parcels. These objects may be grouped together in various ways to form groups. The overall system design is based upon the idea that the application revolves around a set of objects

personal property different types of objects. For example, the data describing dwellings is different from that describing Individual parcels are assembled from other objects. Different classes of parcels are composed of

objects, which may also be composed of other sub-objects, etc. A given class of objects may be used by one or more parcel types. Some objects are composed of sub-

## Data Defined by Tables

#### Allowable Values

System Administrator can define the values allowed in the table and their meaning. IAS has tables to assign allowable values. These determine the allowed codes and what they mean. The

#### Edits

Range edits and special cross edits can be entered message. Using a negative value for the results sets a hard edit; a positive number makes it a warning A table allows the creation of edits on fields that have been coded for them. The user can define an error

### **Processing Options**

compute each part as the base value and apply the grade and depreciation factors to the total. valuation can compute each element of a property to include the grade and depreciation factors or IAS provides alternative methods of valuation for many types of property. For example, residential

Commercial valuation can use the CLT method or Marshal & Swift® (MSW).

Setting the appropriate flag produces a full audit trail of all changes. Setting the flag keeps versions for all changes when appropriate while not setting it during test cycles such as cost table calibration prevents expanding the database.

## **User-Defined Fields/ Calculations**

needs to be changed to match local terminology. there is information that may be desired by some sites and not others. Sometimes just the label of a screen Many of the fields commonly used for property tax processing are built into the system. In some cases,

In some cases, these definitions are coded into the processing options. At other times, they are coded in a

the number that is defined for the given table. IAS contains a large number of user-defined fields. These are often labeled as USER1, USER2, etc., up to

User-defined fields can also be defined to affect the calculation of a value. Placing a predefined calculation function name in the Function field does this.

#### Summary

users with different requirements. As legislative and other desired changes occur they can often be implemented without requiring the programs to be changed. Additional functionality can usually be added define data and calculations to meet their requirements while sharing the same program code with other without changing the way things work for users who do not want to use it. We have discussed how the object structure is used to create the functionality of the system. Users can

#### **IAS MODULES**

This section describes how the seven main modules are used in the overall property appraisal process. Reading this section will give you an idea of how each module can handle everyday data entry processes. The following modules are discussed in this section:

#### The main modules

- Computer Assisted Mass Appraisal (CAMA)
- Personal Property (PP)
- Assessment Administration (AA)
- Tax Billing and Collection (TX)
- Hearing Tracking (HT)
- Delinquent Tax (DQ)
- Manufactured Homes (MH)

descriptions of how it manages data, and major reports associated with each module. Each module description contains the purpose for the module, an overview of its functions, brief

# Computer Assisted Mass Appraisal (CAMA) Module

#### Purpose

the performance of the valuation and review efforts. calculating taxes. It includes a range of reports required for reviewing individual properties and assessing including both land and improvements, for purposes of determining the assessed values used in comparison (regression and comparable sales) and income. CAMA permits classification of properties, includes the necessary valuation tables and algorithms to support the three approaches to value: cost, sales maintains a database of property characteristics from which appraised value estimates are developed. It The CAMA module is a complete and accurate tool for the appraiser to set equitable property values. It

## **CAMA** General Description

## **Equitable Market Values**

emphasize that, when properly applied, all three methods are designed to estimate the fair market value of generating equitable market values. The term sales comparison is used here in place of market to review by experienced appraisers and/or valuation analysts, the CAMA system will meet the objectives of establish fair, uniform, and equitable market values for various types of properties required by state The system supports the three approaches to value (cost, income, and sales comparison) necessary to When properly applied to a database of up-to-date property characteristics, and when subjected to

#### Land Valuation

for the application of influence factors to adjust the base value of parcels whose land is atypical of the gross, or site value. Land in IAS is valued on a market basis using one of five measurements: front foot, square foot, acreage, The front foot method provides for a depth table adjustment. All methods provide

Building = Parcel Value. valuation of the property (market and income). Land valuation is an integral part of producing the property value under the cost approach, i.e., Land + It is assumed that the land value allocation developed above will apply to all

adjustment for excess size. Other land factors affect value, and so model rates can be adjusted by zoning neighborhood. The system automatically applies the unit prices from the model to each parcel, making the street, location, and utilities. The system will allow multiple land lines to be associated with a single The appraiser then specifies, on a neighborhood basis, the applicable land model for parcels in that land models for lots, square foot, and acreage entries to cover the range of land prices in the Jurisdiction. IAS provides for Computer Assisted Land Pricing (CALP) that allows the appraiser to set up a series of

adjusted by applying influence factors or re-specifying the land breakdown, as appropriate, or the land CALP is applied to both residential and commercial properties. The land values it provides can be values can be overridden by inputting the desired unit price

residuals) from sales. approach is to execute a series of report templates that provide vacant or abstracted land values (land high) can be obtained from these reports and used in establishing benchmark models. Land models entered into CALP can be developed in several ways under IAS. The most frequent They can be sorted by neighborhood and other user-specified criteria. Statistics (average, low, and These can be expressed on per front foot, per square foot, per acre or site value

### Classified Use Valuation

system also provides for the recoupment of taxes if land is taken out of the preferential treatment land line assignment of acreage by soil type. Override adjustments can be made at the line level. the land is used for farming, different yield rates can be applied based on year planted. IAS allows for defined classifications. User-definable rate tables are then set up for each classification as appropriate. as crop, age, or income use values. The system can then track both market and use value on each parcel. value and its classified use. This subsystem provides the mechanism for applying use value tables, such IAS provides for a Classified Use Valuation subsystem. Land is appraised based on both its fair market Land valuation is based on use (pasture, tillable, etc.) and soil (actual soil or soil class) or any four user-民

### The Cost Approach

values for individual construction components such as yard and miscellaneous improvements. for time and location differences. Wisconsin, and Wyoming. The cost tables for each class of property are indexed to facilitate adjustments Illinois standard Appraisal Manual and the statewide CAMA systems in Kansas, Montana, West Virginia year history as an appraisal company. IAS computes cost value estimates using the cost methodology developed by CLT during its over sixty Users with proper security can access the cost tables to modify unit This methodology is widely accepted and forms the basis for the

applying the base tables. Sometimes changes in building practices or local conditions will require an structures, features, or components will be encountered which require additions of new codes and prices adjustment to the rate or value for one or more of the base cost components. Occasionally, new types of user modifications to the tables. typical (mean, median) ratio between actual new construction costs and the estimated costs established by tailored to match the cost level in the Jurisdiction by conducting a cost index study that determines the The cost tables used in applying these cost models are standard CLT base tables. These tables can be The design of both the residential and commercial cost algorithms readily supports these

## Residential Cost Valuation

attic, central heat, and plumbing fixtures. Adjustments are made for differences in heating, plumbing, variations from that structure. The standard structure is a 1200 square foot 1-story frame ranch with no basement, attic, finished basement, rec room area, unfinished area, fireplaces, and miscellaneous other Residential cost valuation uses a base price for a standard structure, with additions and subtractions for

Additions are costed at a dollar/square foot rate, with the ability to make size adjustments using a constant and a square root term. Additions may be graded and depreciated separately from the main dwelling.

IAS provides the ability to make adjustments using factors based on neighborhoods and class codes of improvements

## Commercial Cost Valuation

Two cost methods are available for commercial structures, CLT and Marshall & Swift. Only one method be used for a given tax year.

plumbing, heat, etc., on which to base its valuation. To this end, the computed RCN, percent good, and The commercial structure is viewed, for pricing purposes, as consisting of sections and levels, each of which can be depreciated separately. Each level can have its own story height, construction type,

of that line located, so that they are depreciated in accordance with the physical condition and functional utility rating RCNLD are stored for each level. Other feature values are added into the section line on which they are

methods support all appropriate rates depending on building use and type. Both methods calculate a perimeter area ratio using exterior wall sizes applied to wall height. Story adjustments are made where Both methods produce an RCN, which is then depreciated to produce the building RCNLD. and makes fewer adjustments to the base rate. Marshall & Swift includes time and location multipliers. "lowest common denominator" and then make adjustments for any variations in exterior and interior components, with adjustments for certain conditions. The CLT method tends to build a base rate from a for Marshall & Swift. In both methods a base square foot rate is established based upon structural There are some differences between the data collected for the CLT cost approach and the data collected Marshall & Swift has separate rate tables for different quality levels of the same structure type,

#### Condominiums

Final values will optionally include a percentage of ownership of land or building from the condominium system offers numerous variables such as location, floor, view, and amenities to value condominiums. Each unit type within the complex is identified, as well as the areas, rates, and any value adjustments. The The Condo Master screen allows information for the individual condominium complexes to be stored

#### Property Sketch

of the main dwelling and its additions. A computer-printable sketch can be produced with area e.g., R20x10, which (assuming a clockwise direction) would be translated R20D10L20U10. Mouse maintained manually as well as through Mouse Sketch. sketch is stored in a vector format. These vectors are stored as character data, e.g, U25R40D30L20U5L20 Sketches are drawn with a point and click utility (Mouse Sketch) integrated into the IAS screens. The computations and dimensions. Sketch provides the ability to maintain a set of sketch vectors previously entered to define the perimeter Simple rectangular additions may be described by providing the starting direction and second dimension, computed. If the vectors do not close, the system will display the line that needs to be reviewed for errors (up 25 feet, right 40 feet, down 30 feet, left 20 feet, up 5 feet, left 20 feet), and can be entered and The vectors are edited for closure and areas

sectioning and applying adjustments for common walls. do not update the areas/perimeters used for determining value—this allows the appraiser latitude in sketched. For commercial structures, both areas and perimeters are computed from the sketch vectors but provided. The user only enters manually calculated areas if a structure is so irregular that it cannot be The areas calculated from the vector sketch are written to the file and used for subsequent valuation The capability to sketch angles other than 90° and the ability to sketch arcs and circles is also

with different colors or shaded patterns. The graphic sketch allows isolation by floor level and zooms in A graphics sketch display uses the graphics mode of PC workstations to display the line work, dimensions, and labels of the perimeter sketch. This feature also tiles the different areas of the sketch and out for varying scales.

Sub-area codes are displayed to the right of the sketch with the calculated square footage amounts. alphabetical code is tied to each individual sub-area and displayed within the sketch to show the location

using the Mark command structures, miscellaneous buildings can be located in relation to the main structure without being drawn, Individual addition vectors can be maintained without the need to re-key the whole vector. In sketching be vectored or entered as a manually computed area regardless of its order in the sequence of additions. In IAS, there is no limit to the number of additions that can be vectored and calculated. Any addition can

Upon original conversion, IAS will batch load the building sketches and vectors into the database

## Other Building and Yard Improvements

modifications, including obsolescence and override capability. allowing rate flexibility using size adjustments and a grading system. IAS also allows for other Miscellaneous (OBY) commercial and residential items are supported in IAS. Valuation is table-driven,

# Sales Comparison and Multiple Regression Analysis

design of the market submodule allows users to: properties from the master file and build a sales history file for sales analysis purposes. The market submodule produces market value estimates using MRA/comparable sales. The flexible It can extract sold

- Process complete multiple regression analysis modeling within IAS
- Import coefficients from a stand-alone modeling program.
- Enter coefficients for sales adjustment.
- Calculate value based solely on comparable sales.

### **Regression Analysis**

adjusts the coefficients of the other factors to obtain the best least squares fit. this as a constraint, will force the factor into the model at \$8.00. Constrained regression automatically The appraiser/ modeler wants a coefficient between \$8.00 and \$10.00 per square foot and, by specifying a factor such as detached garage area comes into the unconstrained model with a coefficient of \$4.53. For example, due to the mix of sales available and the property factors considered for a particular model, factors to be considered in each model and an acceptable range of values on the coefficient of each factor. appraiser's ease of use. The system features constrained multiple regression analysis (MRA) modeling, designed for the Constrained regression modeling permits the appraiser to specify the property

to develop a complete market model. Appraisal knowledge combines with actual sales to provide better Constrained regression is especially helpful in market areas where lack of sales data makes it impossible

neighborhood or group of neighborhoods. Within a neighborhood, further subsets may be created based on a user-defined data item The system allows the user to create a number of models within the Jurisdiction, each applying to a

place a limit on the number of observations (sales) in a modeling run. Up to 59 of the variables can be subsystem allows the creation of new variables for valuation. specified as candidate variables for a specific regression model. An unlimited number of variables The system supports up to 99 candidate variables for use in regression and market valuation. It does not exponential, logarithmic, and trigonometric functions among others version is also available, but is not usually practical due to performance issues. The market valuation These can be based on algebraic,

coefficients, aggregated into groups, or weighted into a linearized value, for use in modeling and/or arithmetic or algebraic terms. The Edit and Expansion module also allows the user to expand database. The Edit and Expansion submodule allows the user to create transgenerated variables using comparable selection. classification or discrete variables into binary (yes/no) variables. They are then assigned individual extraction submodule includes features for the linearization of assigning weights to coded variables in the The constraint feature allows the user to control the inclusion or exclusion of specific variables.

The system generates numerous performance statistics.

The software, through its transgeneration capability, supports log-log or linear-log models

emphasis in modeling has been placed on calibrating models that provide reasonable adjustments to be Comparable sales is the primary factor in determining the sales comparison value, and hence primary applied in adjusting comparables.

However, the modeling capabilities are quite powerful and can be used in analyzing other property characteristics and value indicators

#### Comparable Sales

prices to the subject property. user-assigned Selection weights. The module relies on regression coefficients to adjust comparable sale The comparable sales submodule uses a Minkowski metric to determine comparability of sales based on

make rational trade-offs between significant differences in various essential property characteristics is not identical to the subject. Weights are assigned which cause the comparability distance metric to When creating comparable sales selection criteria, the user specifies each variable as continuous Discrete variables apply the weight to the comparable sales price if the variable value of the sale

cluster, a superset of all properties exhibiting similar market behavior. five highly comparable sales within the group, it will then search all of the sales for the subject property's In other words, the system searches for comparable sales within the neighborhood group. If there are not

The user can calculate comparables for one parcel, a group of parcels, a neighborhood or the entire file

adjustments are normally the MRA coefficients from the model and used to value the subject parcel The user specifies the property characteristics to appear on the report and the selection weights. The

These comparables are used in conjunction with the MRA model to generate an estimate of the market review document known as a comparable sales report. value of the subject property. This estimate can then be correlated with the cost approach on a single field

model results There is a series of detail market screens that allow for comparable sale review, criteria selection, and

### Non-Linear Methods

download CAMA data to personal computers for input to PC-based modeling packages that perform Other model calibration methods can be implemented. The export features of IAS can be used to

applied to properties and the resulting value estimation imported back into the IAS database. feedback analysis (Adaptive Estimation Procedure), non-linear regression, etc. These models can be

IAS currently supports third party statistical analysis interfaces such as SPSS

#### **Income Valuation**

analytical tools including MRA are available to the user for the purposes of gross rent or gross income (neighborhoods) are maintained in the system and applied consistently to each property with the multipliers is available as part of the model approach for appropriate types of properties. Several value in accordance with the income approach. The application of gross rent multipliers or gross income appropriate characteristics. Income models for various types of income-producing property in different geographic areas The potential net income streams are then capitalized to provide estimates of

most appropriate final value. methods, including GRM, GIM, mortgage equity, discounted cash flow, property residuals, and direct Statements of actual income and expenses can be used to calculate an income value using several capitalization. These methods have corresponding review screens for valuation. The user chooses the

appropriate value estimate developed from owner statements. Several calculation methods are available to compute a final income ProForma type approach. Use of actuals is implemented by entering income and expense detail and units against which income and expense models will be applied. This income model approach is a in the collection of improvement characteristics for the cost approach, as the basis for aggregating areas actual income and expense data. The IAS income approach allows the user to choose between an income model approach and the use of The appraiser compares both the modeled and actual income values and chooses the most The income model approach uses the description of the property laid out

The income model approach contained in the system performs valuation by income capitalization for all types of commercial properties, including apartments, hotels, motels, offices, retail, warehouses, auto service, banks, restaurants, and fast food. There are 25 pre-defined categories installed with the base system, and the user can define others.

acreage valuation. occupancy adjustment factor, and capitalization adjustment level. Provisions are included for excess for exceptional properties by inputting income quality rating, expense adjustment factor by age, collected on the standard Commercial/Industrial data collection form. the MRA module in IAS to analyze the data. Models are developed on the basic physical characteristics spreadsheet analysis of income and expense data or by utilizing computerized modeling software such as that it does not require income data on each property. Income models may be developed through external The income model approach differs from traditional computer-assisted income valuation techniques in Valuation results may be adjusted

### Value Reconciliation

estimate for the market approach) are written to the database. Any one of these values can be selected as valuation is applied to the parcel. All three estimates (with both market comparables and regression The CAMA Appraised Value screen is a final value screen where the user chooses which method of the final value, or an override value can be entered for the parcel.

assessment posting from the value reconciliation screen IAS allows for a last review date on the value reconciliation screen and supports re-costing and

## **CAMA Data Management**

The CAMA module provides a complete database of property characteristics. Here is a partial list:

- Neighborhood
- Map/Routing
- Location Address
- Property Use and Classification
- Zoning and Municipality
- Topography
- Utilities
- Reason for Change Codes
- Economic Condition Factor
- **Exemption Percent**

- Size (front feet, square feet, acres, units)
  Land Code (use)
- Influence Factors
- Classified Use (soil, etc.)

#### Residential

- Story Height
- Style
- Construction
- Year Built, and Effective Year Built
- Basement and Attic
- Heating and Heating System
- Miscellaneous Features
- Fireplaces, Stacks, and Openings
- Additions (separately graded and depreciated)
- Grade
- Condition, Desirability, Utility (CDU)
  Physical, Functional, Economic Depreciation

#### Condos

- Type
- Level
- View
- Complex Name and Number
- Unit Number

#### Commercial

- Structure Code
- Year Built, Effective Year Built
- Construction Type
- Area by Section
- Wall Height

- Number of Stories
- Interior Condition
- Attached Other Features

#### Income

- Tenant Name
- Rental Income
- Other Income
- Expenses by Type
- Area
- Income and Expense Dates
- Contact Info

not included in the pre-defined characteristics. database. There are also a number of user-defined fields available for locally significant characteristics In addition to these maintainable fields, intermediate and final value calculations are stored in the

#### CAMA Reports

IAS provides a number of pre-defined reports. These include:

number, and owner's name. Appraised/Assessed Value Listings - The system provides the ability to print appraised/assessed value listings for the Jurisdiction, sorted by parcel identification and/or map and routing number, account These listings contain, at a minimum:

- Neighborhood or Tax District
- Parcel I.D. and/or Map and Routing
- Account Number
- Number of Acres
- Class of Property
- Improvement Value
- Land Value
- Total Value
- Totals are produced by property use code within neighborhood or tax district

that may result from Formal Appeals proceedings or subsequent Court action. information for documenting the updated value abstract and for tracking and documenting value changes report listing all value changes, the reason(s) for those changes, and the total changes by tax district and reason code within each class. This report provides the Assessor/Appraiser with the necessary codes in the system, the user can track all value changes as to amount and reason, and produce a detail Valuation Report - Value Change Abstract - Assessor's Final Report - Using the value change reason

neighborhood, etc. reassessment by property class and tax district. It can be used to evaluate the impact of the reassessment before release of new appraised values, i.e., to identify any shifts in value between classes, within Impact Analysis - This report provides detail and summary information as to the change in value due to

new assessed value and an "impact" tax rate calculated by assuming the same fiscal requirements Rate divided by New Tax Base (excluding New Construction). for any inventory changes) and previous effective tax rate. The "impact" taxes are calculated based on the after revaluation. The taxes before revaluation are calculated based on previous assessed value (adjusted Impact Notice - This is a taxpayer information document that presents the new appraised value to the taxpayer in light of the taxes that the taxpayer would pay on the same property prior to revaluation and (effective tax rate times tax base) as the previous year, i.e., Impact tax rate = Old Tax Base times Old Tax

significant percentage, the taxes will not necessarily increase by this same amount. Moreover, in fact, for to other properties. some properties the taxes may decline if the new assessed value shows a smaller increase in value relative The impact notice shows the taxpayer that, even though the assessed value may have increased by a

Data Mailer - Property Description Report - A data mailer can be produced that will show selected physical characteristics of properties on the database. These can be mailed to taxpayers for verification of information or sales verification based on ownership change.

characteristics organized by building. An expanded version of the report includes the income model approach for commercial properties. This document may be used for field audits (data verification and Property Review Document - IAS produces a detailed field review document that lists all of the property review), picking up new construction and alterations, or value review

new value and the percentage of change per parcel Value Change Report - IAS produces a standard value report that compares the prior year value to the

Appraisal staff to take to the field, including assessment data, permit data, ownership data, and sketch of Field Work Sheet -A field work sheet can be produced that will store the needed information for the

associated rate Agriculture Rate Table List - This report contains all crop or soil and use types in the table and the

Agriculture List by Parcel - This report prints all Agriculture types per parcel along with Owner Name, Classified Use Application Number, Class, Range-Tract-Section, Appraised, and Assessed Land.

Agriculture List - This report prints totals by Agriculture Category or Tax District

Current Classified Use Valuation List - This report prints all parcels on the Current Classified Use Number sequence. Valuation program. It contains Parcel ID, Application Number, Owner Name, Classification, Acreage, Appraised Values, and Mailing Address. This report may be in Owner Name, Parcel ID, or Application

Current Classified Use Valuation Applications - The system generates the classified use applications

Computer-Printed Property Record Card - Property Record Cards can have been created for some Jurisdictions. These cards can be printed for individual parcels or in continuous form. In general, the computer-printed property record contains the following data:

- Parcel Identification
- Ownership
- Legal Description
- Land Description and Pricing Data
- Improvement Description and Pricing Data
- Correlation of Values
- Sketch of the improvements on the property

## Personal Property (PP)

#### Purpose

reasonableness of a return. the property. The personal property module also provides auditing features to assist users in verifying the the computation of an assessed value, and in case of failure to report, a mechanism for forced valuation of The Personal Property module provides for the receipt and processing of property returns from taxpayers

factoring) purposes, and administrative functions, such as forced audits, penalties for failure to file, etc., often vary by state. Various forms can be produced and select lists produced using Oracle tools such as Oracle Discoverer®. Reporting forms, the categorization of personal property for valuation (and sometimes assessment

## Personal Property General Description

extension, and timely reporting. The on-line Personal Property System provides for the maintenance of personal property information, tax The system provides the following functions:

- Unlimited history to view values and tax history information by tax year and file year
- Unlimited alternate name indexing (aka, dba, etc.)
- Unlimited alternate identification number indexing
- Unlimited location address indexing
- Optional Auto-assigning of PP Account number with the ability to customize the assignment of account numbers by installation site
- Unlimited ownership and multiple ownership information
- be set up as State use codes or any other defined codes Inquiry search screen for real or personal property records using user-defined codes that can
- Account via OCR-A or bar coded documents
- Entry of account numbers for mass filing of non-filer entry using OCR-A or bar coded
- exemptions for any account/parcel during reconciliation Reconciliation status summary screen to reflect preliminary and changed values and
- Status of the account, review date, additional status flags, tax codes, and neighborhood codes
- assessment record Entry of new account records and database changes on a current year, next year, or back
- Unlimited access to add, insert, and/or modify comment maintenance on a detailed line basis
- On-demand or in batch reporting for a single account or entire file or sections of the file
- Bar Code scan of the Account number on the Tax Return
- owner name, or alternate name, tax district, business name, NAICS code, etc. Index search screen to find a personal property account by account number, location address,
- activities, such as the removal of an exemption or sale of real property Integration from the IAS Real Property System to notify a personal property account of key

In addition, the Personal Property system provides the following interfaces with the IAS base module

- Exemption Sub-System
- Common Owner Table
- Mortgage Code/Mailing Number Table
- Alternate Names Table
- Alternate Identification Numbers Table
- Alternate Addresses Table
- User-Defined Field Table
- Parcel Comment Table

### Account Maintenance

security number, fiscal dates, file by date, extension date, etc. Fifty user-defined fields available can be date, business start date, federal ID number, business description, business type, industry code, social customized for the terminology of each site. There are also user-defined table codes set up for the computation of a value. The user can create an account and build account information pertinent to the business, such as filing

### Value Maintenance

tax returns. The detailed valuation screen supports the entry of appraisal information used in the valuation process, displaying all cost information and values associated with individual property records. The Personal Property Value Maintenance screen allows the authorized user to enter detailed filings from

taxpayer value, assessed value, year acquired, number of units, etc. The Personal Property Value enter current and delinquent (back assessment) detail asset information that includes original cost value line item entered Maintenance screen will calculate an appraised value amount using the rates/factors associated with the The subsystem incorporates classes of detailed records that conform to State guidelines. The user can

entry option only displays required entry items to speed up entry of detail assets. The user can enter detailed personal property line items for regular items, manufactured homes entries, and CAMA dwellings/detail line items. A single line or a multi line entry is available. The multi line

### Leased Information

addition to entry availability, the users can access a lease cross-reference inquiry screen for Lessee to name, lease account number, and lease assets by lessee and lessor. They also have the ability to maintain Values can be assessed for special conditions. Users can maintain lease information, such as the lease Lessor relationship and Lessor to Lessee relationship for the user to view lessee/lessor information. lease information for an account and cross-reference accounts for future value assessment/auditing. cased equipment is entered as owned or leased equipment, thereby building a cross-reference file

#### **OBY Interface**

Personal Property module is a shared module with Real Property. same OBY capabilities such as sketching, Property Record Cards, worksheets, and valuation, because the CAMA OBY entries, total building value, selective dwelling values, additions, and other features can be pulled into the Personal Property system for residential and commercial properties. CAMA maintenance is accomplished before selecting CAMA entries for Personal Property assessment. The user has all the

## Summary View of Values

summarize values. A total value is displayed at the bottom of the screen, broken out by original, adjusted and net for appraised, pollution control, filing penalty, omitted penalty, exempt, and assessed values and There is a summary view of values and taxes. Category and class (also known as sum line number) User-defined labels customize the terminology of each site.

### Penalty Calculations

to perform this on-demand function.) A batch program is also provided to calculate penalties user can calculate late filing, non-filing, and/or omitted penalty on-demand. (This module can applicable assets/accounts. The user can view the calculated penalty view on a detailed line basis. automatically calculate these penalties upon committing the transaction, if desired, to eliminate the need The subsystem has the ability to assess late filing penalty, non-filing penalty, and/or omitted penalty on The

#### Calculated Values

calculated value becomes the final appraised value for the line item. The system uses an unlimited option to use the calculated value or to override the value. If the user does not override the value, then the Values are calculated on a per line item basis. The Personal Property Value Maintenance screen uses the table rates previously established upon installation to calculate the appraised value. The user is given the determining what depreciation table to utilize. amount of depreciation tables to finalize the RCNLD. IAS supports quality factors and asset types in

#### File Year

on the account and file year entered. Personal Property filings will be entered per file year. Taxes can automatically be calculated upon committing the transaction or pressing the calculation button. Tax rates used are based on the tax district

the current year for a prior year(s). The Personal Property Value Maintenance screen will use the appropriate valuation and tax rate tables for the effective file year entered current assessment year for the current year. Back/prior assessments are identified as tax returns filed in year) or is a back / prior years assessment filing. Current filings are identified as tax returns filed in the The file year will indicate whether this is a current filing (where the effective tax year equals the file for

## Interface With AA Module

queried on at a later time. Alternate names are owner names DBA, AKA, FKA, etc., and can be queried and utilized in the Personal Property Value Maintenance screen to query an account by either or both of standard modules. Alternate name and alternate ID options exist on the drop-down menu available for by selecting the appropriate button and entering the name to be queried these browse fields. concept. These options would typically be entered in the Personal Property Account Maintenance screen entry/query at any time in all screens in Personal Property. The Personal Property Value Maintenance screen uses the alternate identification and alternate name Alternate IDs can be established on any number that is determined relevant to be This approach can be referred to as a browse

been copied or inserted into the Personal Property Value Maintenance screen, the user can assess the tax year into the current tax year. This feature exists in the copy maintenance module. Once records have records as any other personal property assessment for the current tax year using the Personal Property A copy function is provided within the AA module to copy personal property detail line items for a prior Value Maintenance screen.

### Vehicle Maintenance

respect to the zone, and/or location upon entry based on the database information. The user can perform the valuation of automobiles or motorcycles and validation between mileage with

## Personal Property Data Management

information. Here is a partial list: The Personal Property module provides a complete database of detail asset characteristics and owner

#### Detailed Information

- Asset ID
- Description
- Туре
- Category
- Note Code Year Acquired
- Number of Units
- Calculation Method
- Schedule
- Trend Factor
- Taxpayer Value
- Original Cost Value
- Assessed Value
- RCN Value

#### Owner Information

- Neighborhood
- Tax District
- Owner Name
- Property Location DBA Name
- City/State/Zip
- Total Number of Owners
- Owner Type Code
- Owner Link
- Agent Code
- Martial Status

#### Account Information

- SIC Code
- Use Code
- Business Type
- Description Type
- File Extension Date
- File Extension Number
- File Date
- File Code
- Lien Code
- Lien Number

## Personal Property Reports

and tax district. Alpha List - This report is generated in owner sequence displaying Account ID associated with the name

Select Parcel List - This report can be generated for a selected parcel listing of account information for general purposes selected by parcel number, neighborhood, or zone

Non-Filer Report – This report contains a list of non-filers by fieldref and account type

neighborhood, or zone. Field Location Index - This report generates a field location report selected by parcel number,

Business Worksheet - This report generates a personal property worksheet for regular business accounts containing ownership information and valuation detail by selected parcel numbers, neighborhoods, or

Leased Equipment Worksheet - This report is a personal property worksheet for lease accounts containing ownership information and valuation detail by selected parcel numbers, neighborhoods, or zones.

previous year assess values Batch Cost Report - This report provides the user with a list of accounts comparing their current and

Value Change Report -This report identifies the updated value changes for a selected period of time

year record through a screen Certificate of Corrections - This report prints a State-approved certificate of correction form utilizing the The user also has the ability to generate and pass a correction and note to a previous

Omit Letter - The system will generate an Omitted Letter if the filer has personal property assets that are

Mailing Labels – The system will generate mailing labels for the requested classification of parcel type

and conforms to State guidelines Personal Property Tax Return – The system generates a report that is customized by the installation site

End of Year "Rollover"—This report rolls over personal property accounts. This report will also roll over tables from modules that are interfaced with the personal property module, such as: Owner, Alternate and Multiple Owners, Legal, Mailing Address, and Assessment.

Personal Property Batch Cost - This report gives the user the ability to batch cost all assets or selected assets based on parcel number ranges, account type, fieldref code, neighborhoods, or zones.

Non-Filer Update - This report is a batch update that calculates non-filer filer accounts.

that already had a penalty applied. parcel number range, account type, and/or penalty type. It also gives the option to re-calculate accounts Penalty Update - This report gives the user the ability to calculate penalties for accounts based on a

Cost Schedule Rollover - This report creates appraisal records to be used in calculating values

property sub-module selected assets based on parcel number and account range by rolltype. Batch Deactivation - This report gives the user access to deactivate or reactive accounts in the personal

## Assessment Administration (AA)

#### Purpose

Extension module and used for tax calculation and roll certification. Personal Property. The information from the Assessment Administration system is carried into the Tax transfer information. This information can be maintained through transfer processing, split processing, and combination processing. AA also contains summary valuation information from CAMA and The purpose of the Assessment Administration module is to allow the user to maintain owner, legal and

# Assessment Administration General Description

quicker and more accurately. The Administration Assessment module of IAS provides the following features to perform clerical tasks

#### Inquiry Indexes

References the desired information when the Parcel ID is not known. Some examples include: owner name, property address, appraisal ID, and relationship between Real and Personal Property Accounts.

## Standardized Names and Addresses

homestead, and mailing name. This approach reduces the amount of data stored and standardizes owner Allows the user to establish a single name and address to be referenced for each owner, use value

#### Zip Code Table

display the correct city and state from the standard zip code table This feature allows the data entry operator to enter a five or nine digit zip code. The system will re-

# Multi-Year Assessment and Collection Data Maintenance

assessment cycle. Unlimited years of data can be stored in the Assessment history screen Allows data to be entered at the time the activity occurs, regardless of the stage in the particular

### LANDISC Interface

to the detailed property characteristics. This option can provide a real-time, on-line interface with the digital image (picture) of the property tied

### On-Line Audit Trail

The system can keep a historical reference of all changes by user ID and maintenance date on selected screens. The on-line audit provides an easy visual check of the changes made to the property.

## **Unlimited Ownership Name and Address**

an unlimited number of years. The only requirement is the amount of physical disk space that the system has available. The ownership screen displays owner name, percentage of ownership, exemption status, IAS has the ability to store a complete detail history of ownership names, addresses, and sales history for and social security number per owner.

### Status Review Screen

IAS has the ability to display the most current status of a parcel at any given time

## **Unlimited Property Addresses**

The system stores unlimited property location for both real and personal properties. The user can logically link the situs address to each line of data in the database from any IAS screen.

# **Assessment Administration Data Management**

The major components of the system can be divided into the following segments

## Real Estate Split Tracking

how it works: Real Estate Split Tracking provides for a streamlined method for dividing real estate property. Here is

also be entered at the same time. Parcel value has a proration option available for valuation and special The original parcel number is entered into the split tracking system with the split number, tax year and all new parcel IDs created as a result of the split. New data for the legal description and name/address can

The system will balance the acres to verify that total new acreage equals old acreage

## Real Estate Combination Tracking

The Combination Tracking feature allows for an efficient method of combining multiple properties.

providing an efficient means of tracking combined parcels. entered into the combination tracking system. The system will deactivate the old parcel numbers The combined parcel number, new legal description, combination number, acres, and old parcels are

## Real Estate Transfer Tracking

data, and note sections available. The Real Estate Transfer Tracking feature provides a history of all transfers on-line with ownership, sales

### **Exemption Processing**

The AA module can maintain the exemption status of a property.

## **Unlimited Legal Description**

The AA Module can store and print the entire unlimited legal description and pass this data to other IAS Modules. Users have the ability to highlight, cut, paste, search, and replace legal descriptions. Additional define as many fields as necessary to meet their needs fields that are available include subdivision name, plat book and page, block, unit, phase, etc. Users can

#### **Annual Rollover**

Annual Rollover in IAS can be implemented per module. Site-specific business rules can be applied to meet any special requirements. For example, some Jurisdictions determined that they would like to rollover deactivated records; other sites do not want this feature.

IAS provides for the valuation of land enrolled in preferential assessment programs. Land valuation is based on Use (pasture, tillable, etc.) and Soil (actual soil or soil class). User- definable rate tables are

preferential treatment program. at the line level. The system also provides for the recoupment of taxes if land is taken out of the planted. IAS allows for land line assignment of acreage by soil type. then set up for each Use/Soil entry as appropriate. Different yield rates then can be applied based on year Override adjustments can be made

## **Assessment Administration Reports**

acreage and parcel count by classification. Valuation Totals - The Valuation Totals report contains District and County totals for land, building

Abstract of Real Property - The system provides detailed information for preparing the Abstract of Real Property. District and grand totals are a summary of the value changes by reason code or by state specific

Abstract of Values of Land Taxed According to Specified Use Value - The system provides detail ag /land use information to generate the values needed for this report.

Abstract of Exempted Real Property - The system provides the values to produce an abstract of exempted

Description, Acres, Range-tract-section, Appraised, and Assessed Values. Exempt, Gas, Oil, Public Utility, etc. Classification List - The system will generate a report based on property classification. Example: The list contains Parcel ID, Owner Name and Address, Legal

Alpha Cross-Reference List - This report is generated in owner sequence displaying the Parcel ID associated with the name

Mailing List - This report is generated in mailing name sequence displaying Parcel ID, Mailing Name, Mailing Address, and Loan (Mortgage Lender) Number.

Parcel ID, Alpha Legal Cross-Reference - This report is generated in owner sequence displaying Owner Name, Legal Description, and Acreage.

Mailing Name/Address, Legal Description, Loan Number, and Date of Mailing Change Detail Mailing List - This detail report prints in mailing sequence and displays Parcel ID, Owner Name,

Description, Appraised Values, Class, Acres, Transfer Number, and Parcel ID. Transfer List - The system generates a report of all transfers. It contains Old Owner, New Owner, Legal

Code. Land Use Code Listing - This report contains Parcel ID, Owner Name, Classification, and Land Use

Code. Neighborhood Code Listing - This report cross references Appraisal ID, Parcel ID, and Neighborhood

Partial Value Listing - The system generates a repo completed. It contains Parcel ID and Appraisal ID. report of new construction parcels that are only partially

Appraisal ID, and Owner Name Appraisal Identification Listing - This report is generated in Parcel ID order containing Parcel ID

printed in Name or Owner Code sequence. Owner Code Listing - This report prints the Owner code and the associated name and address. It may be

This eliminates the need to encode City/State manually on every parcel. Zip Code Listing - This report identifies all zip codes used in the county and is used to maintain consistent zip codes county-wide. The owner/mailing addresses use the zip code field to display the City/State.

Homestead Listing - This report reflects all parcels that currently have a homestead exemption reduction.

for all reappraisal changes, new construction changes, or all value changes Valuation Post Cards - The system will generate a Revaluation Notice Post Card. Cards may be printed

or range of parcels Labels - A generic label program is available that will print mailing labels for the requested classification

Class, and Appraised Values Parcel Value List - This programs accepts a range of parcels and generates a report containing Parcel ID,

has the ability to store the detail reasons for the denial in the Exemption database Denial Notices - The standard Department of Revenue denial notice is provided in a batch mode. User

volume Mainframe printers. Files can be adapted to meet local requirements. large volume printing of these state mandated forms. Some sites prefer to print these forms on large Homestead, Total Exemption and Ag Receipt Cards - ASCII flat file is produced that can be used for

Homestead Field Review Documents — Exemption field review documents are available for all Homestead End User can flag parcel as a problem account and field-tracking document will be generated

exemptions, and return mail, to just mention a few options Homestead Letters - IAS provides a wide variety of letters available for tracking exemptions, deleting of

## Tax Billing/Tax Collection Module (TX)

#### Purpose

processing. After extension, the calculated tax amounts are available for collection. property taxes and all related charges. Administration Module. This calculation can occur by means of a batch process or through on-line (calculated) based on rates maintained in IAS and property valuation maintained in the Assessment The core purpose of the Tax Billing and Collection Module (TX) is to extend, collect, and distribute In IAS, property taxes and secondary charges are extended

payments and Mortgage Company payments. be directly posted to parcels through the use of on-line payment processing screens, or IAS can accept payments processed through third party cashier applications utilizing the IAS Payment Interface. Additionally, IAS accepts payments from a number of mass payment processes such as Lock Box The TX Module accepts a number of different means by which payments may be posted. Payments can

Once payments have been accepted, IAS allows for the organization and distribution of the payment funds received and allocates these fund to the taxing authorities. This process is referred to as Tax Settlement and Disbursement processing, in IAS.

An overview of the features of Tax Billing and Collections:

- Tax Rates
- Tax Extension
- Production of Tax Bills
- Adjustments to Tax Values
- Payment Processing including:
  Online payments
  Batch payments
  Third party cashier application payments
  Refund processing
  Pretax processing
  Escrow processing
- Delinquent processing
- Special Assessments
- Tax Settlement and Disbursements

# Tax Billing and Collection General Description

#### Tax Rates

arrangement of IAS. jurisdiction, multiple jurisdiction, and multiple value class rates may all be processed in the tax rate module of IAS allows the user to maintain a variety of rate structures. Rate structures such as single The organization and maintenance of tax rates are a key component of the tax extension process. The TX

#### Tax Extension

automated posting. such as at time of payment posting, at time of original charge calculation, and on a fixed monthly basis both fixed-and percentage-based charges. Automated posting may take place at user-defined intervals, The term *Tax Extension* in the TX module refers the calculation of original taxes and related charges for a given collection period. The TX module provides for an automated calculation and posting process of The tax and fee definitions define the various types of fees, penalties, discounts, and interest used in the

### Production of Tax Bills

line and off-line bills are created and maintained for the production of tax bills. in batch mode for mass distribution to tax payers. Generally, individual tax bills are unique to each Collection module. Tax bills can be generated in real time for printing on an as-needed basis or processed installed site and must adhere to legislated standards. As a result, routines that generate these custom on-The production of tax bills is a direct result of the Tax Extension process in the Tax Billing and

#### Tax Adjustments

payments based on adjustments. and manually in the system. The tax adjustment process allows for the reversal and redistribution of tax Performing adjustments to tax charges due to value changes, fee adjustments, rate changes, and other requirements that impact tax charges is a primary role of the Tax Billing and Collection module. The module provides the means by which a variety of these adjustments may be performed both automatically

### Payment Processing

Payment processing in the Tax Billing and Collection module provides for a cash receipting system that facilitates the posting of payments to outstanding tax charges. This system provides a number of reports that allow for the daily balancing of collections with posted amounts, in addition to refunds and pretax

Additional solutions to collecting taxes are also provided in payment processing

- cash receipting can be accomplished (i.e., tax collection, licenses, parking fees, etc). cash receipting systems. Cashier Interface - The system provides an interface that may be utilized with various front-end This allows for a single cashier system from which all over the counter
- to a specified tax service agency. Mortgage company and tax service agency payments can also bills may be generated through electronic media and sent to the specific mortgage companies or agencies are processed through the batch payment processing function of the TX module. be received and processed through batch payment processing Mortgage Tape Payments - Payments initialized and received through mortgage company Tax
- transmitted payments received through the lock box of a bank. Lock Box Payments - Payment processing provides the option to process electronically
- Other Batch Payments Processes The payment processing function of the Tax Billing and Collection module allows for payment processing through additional batch means such as Authorized Charges (ACH) processing

#### Refund Processing

overpayments are processed The payment processing functions of the Tax Billing and Collection module allow for the collection and issuance of refunds in overpayment situations. Refunds are automatically generated and maintained as

#### **Pretax Processing**

extended and available for payment. module. Pretax processing is an additional feature of payment processing in the Tax Billing and Collection Pretax processing allows for the collection of funds for later application to future outstanding tax The funds are placed in a holding area in the module where they remain until future taxes are

### Special Assessments

multi-year property-based special assessments. These special assessments are integrated with all functional areas of the module and can be applied to any property with which taxes are to be calculated. The special assessment subsystem can accommodate multiple types of special assessment calculations The Tax Billing and Collections module provides a subsystem for the establishment and maintenance of

- Calculated using millage rates applied to assessed values.
- Manually entered by the user for a billing cycle.
- Amortized over a number of billing periods.
- Single Flat tax amounts applicable to all parcels
- Fire district assessments based on a specified unit type such as per lot, per acre, and per square foot under roof.

## Tax Settlement and Disbursements

collected and available for disbursement to the various taxing entities. This reconciliation takes into quarterly, etc. Tax Settlement and Disbursement frequencies vary from one jurisdiction to another, i.e., daily, monthly, consideration tax credits that are to be reimbursed to the jurisdiction from other governmental agencies. The Tax Settlement and Disbursements function provides for the periodic reconciliation of funds

The Disbursement/Settlement Scheduler allows for the definition of the frequency and level of settlement required and needed in disbursement reports. The IAS Disbursement/Settlement Modifiers allow the user to define percentage reallocations of monies appropriated for disbursement.

Settlement extract procedures extract Tax Settlement Detail records from the database and summarize this information based upon the parameters outlined in the Disbursement/Settlement Scheduler table and Disbursement/Settlement Modifier table specifications. The summarized information is then stored in the database for subsequent inquiry purposes.

The system also permits interfacing with various financial packages allowing for distribution information to be processed through the General Ledger or Accounts Receivable and Payable when necessary.

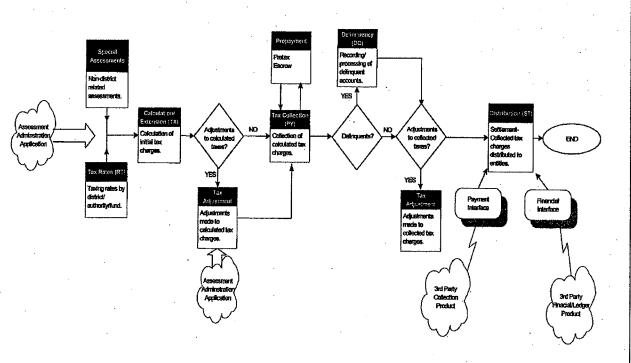


Figure 2: Tax Billing and Collection Data Flow

# Tax Billing and Collection Related Reports

Project Table List - This report prints all projects and contains Project Name, Calculation Code, Factor, Mills, County Fee, Assessment Type, Years Beginning and Ending, Delete Flag, Ditch Amount, Interest, Bond Date, Months and Ordinance Number.

charges for the selected tax year. Special Assessment Listing - This report is generated by parcel number within project and contains all

Number, Charge, Interest, Interest Remaining, Principal, Remaining Principal and Pay Off Amortization Total List - This report may be generated by Project or Parcel ID and contains Project

fees applied in a project listing Special Assessment Tax Abstract - A Tax Abstract of all special assessment charges with the Jurisdiction's

with tape or floppy disk data from taxing Jurisdictions. Special Assessment Data Transfer - The Tax Administration module provides the capability to interface

### Hearing Tracking (HT)

#### **Purpose**

supporting documentation for each hearing and sending results letters to the taxpayer. formal or judicial appeals. This includes scheduling hearings, assigning hearing officers, preparing The Hearing Tracking Module is used to manage the appeals process from informal filings through

## **Hearing Tracking General Description**

### **Scheduling Hearings**

hearings, time limits for filing, appointment duration, and time allowed for resolution. The user can define any type of hearing appropriate to the Jurisdiction. The user specifies the order of the

This module allows for the scheduling of any type of hearing via telephone, at the counter or by written request. It matches the requests for hearings with the availability of hearing boards. parcels as one entity. In the instance where multiple parcels are involved, a case number can be assigned to treat the group of

#### Hearing Boards

Their availability, including breaks, can be factored into the scheduling process. Any number of "Hearing Boards" can be designated. Their makeup can be designed by name or position.

#### **Taxpayers**

including agent name, firm name and address, as well as their contact information. Taxpayers can represent themselves at the hearing or can be represented by Tax Representatives. Taxpayer information is drawn from the IAS database. Tax Representative information can be stored,

## **Integration with Appraisal Data**

regarding the case in question. This provides a "when needed" level of information support to the bearing As appointments are conducted, the Hearing Boards have access to all supporting documentation

Administration modules. Once decisions are made, value and data changes can be posted back to the CAMA and Assessment

## **Hearing Tracking Data Management**

A partial list of data managed by this module includes:

- Hearing type
- Date filed
- Appointment type
- Appointment date and time
- Taxpayer opinion of value
- Decision date and reason
- Names and titles of Board Members
- Name of appraiser representing the Jurisdiction
- Name of taxpayer attorney or representative
- Free format notes
- Additional user-defined fields

## **Hearing Tracking Related Reports**

The major reports of the Hearing Tracking Module include:

- Hearing schedules by Board
- Supporting appraisal documentation for the hearing
- Change Notices to Taxpayers
- Jurisdiction-specific results letters

## Delinquent Processing (DQ)

#### Purpose

features are included in Delinquent Processing: The Delinquent Processing subsystem allows the user to administer delinquent accounts. The following

- Initiate a qualifying parcel on a delinquent contract program.
- Monitor the payment process of the delinquent plan.
- Calculate and apply unapplied penalty and interest charges to selected parcels upon contract default.
- Query all delinquent information.
- Generate delinquent coupons and tax billings for delinquent plans.
- Record delinquent parcels qualifying for bankruptcy.
- Record delinquent parcels in foreclosure.

# Delinquent Payment General Description

## Payment Contract Inquiry

Payment Contract Inquiry provides the user with an inquiry view of the Contract Plan Maintenance

## Payment Contract Inquiry by Parcel

history of the parcel. Payment Contract Inquiry by Parcel lets the user query a parcel and view all contract plans throughout the

# Unapplied Payment Contract Interest Inquiry

information for a particular parcel An Unapplied Payment Contract Interest Inquiry allows a view of any of the various unapplied interest

## Payment Contract Plan Maintenance

Features of the Payment Contract Plan Maintenance include: payment contract plan through which a property owner can pay an otherwise unmanageable delinquency The Payment Contract Plan Maintenance allows the set-up or modification of a single or multiple parcel

- Single or multiple parcel plans
- System-generated contract number
- Automatic delinquent payment information and mailing information pulled in from the current tax information in the Tax screens
- Cycle or monthly payment installment setup
- Automatic installment amount calculation considering first month's payment
- Letter and/or coupon on-demand creation or batch mode
- View of ownership and location address
- Phone numbers

- General notes
- User-maintained default date
- Full history of plan

## Certified Delinquent Maintenance

certified after being unpaid at the conclusion of the current tax year. Certification is done automatically as part of the end-of-year tax and mailing rollover. After all delinquencies have been paid in full, the certified delinquent year is removed. Certified Delinquent Maintenance allows the user to track certified delinquent parcels. Parcels are

## Bankruptcy Maintenance

Claim (POC) amounts and views of payment information. Maintenance provides the ability to enter unlimited parcels for a given case along with separate Proof of The Bankruptcy Maintenance provides the user with the ability to add and modify parcels on bankruptcy

Users can also maintain trustee and attorney information along with unlimited history notes that may be crucial to the case

The balance for each parcel is viewed based on POC payments entered by the collection department. critical for these payments to be entered with a payment type of POC in order to be reflected properly.

## Foreclosure Maintenance

Foreclosure Maintenance is used to maintain the foreclosure history on parcels with unlimited lien holders and attached history notes.

# Payment Contract Unapplied Interest Maintenance

penalty charges to be applied in the event a parcel defaults on the contract plan. If the contract plan is not Payment Contract Unapplied Interest Maintenance provides the ability to modify and build interest and kept current, the user can use Foreclosure Maintenance to share the amounts that will be applied to the

program will also update to apply unapplied interest charges to bankruptcy parcels. The IAS Penalty and Interest Program updates this table automatically for delinquent contract plans. This

Users can flag individual or ALL charges in this table for a parcel to be applied by the Post Unapplied Interest Charges program. Before flagging the delinquent contract plan, default entries must be made.

## **Delinquent Payment History**

monthly coupon billings. Delinquent History Update to insert the billed records, such as first half tax bills, second half tax bills, and information for delinquent monitoring. Delinquent Payment History Maintenance is also updated by the Delinquent Payment History Maintenance builds delinquent billings and also displays payment

plan amount entered at the time of the contract initiation viewing. The detail transaction lines show the contract plan balance that is based on the original contract Delinquent Payment History shows the actual net delinquent taxes due on the parcel at the time of the

#### Levy Maintenance

unlimited lien holders, history notes, custom data for fees, condemnation, and tax sale information Levy Maintenance is available to maintain levy information history on a parcel level. It provides

due. until time of payment. Levy Maintenance can hold fees and penalties that are calculated, but not included in the ADJUST table These fees and penalties need to be included for cashiering to determine amounts

### Transfer Maintenance

governmental source. Transfer Maintenance compiles information concerning the transfer of tax liens to a private non-

Transfer Maintenance records the actual purchaser for the tax year and all contract information. It also documents the amount paid for the transfer and the recording information for the transfer.

## **Delinquent Processing Related Reports**

original contract amount, and status. This report can be sorted by the parcel ID. Payment Contract List - A system-generated report containing information such as length of the plan

Delinquent Collection - Sorts by date delinquent collections to date for the year

since the specified before date. Non-Payment for Delinquent Contracts - Report for payment contracts that have not had a payment made

Contract Statistics - Year to date information for delinquent contracts.

Unapplied Interest for Voided Contracts - Calculates the to date unapplied interest for contracts that have

Delinquent Contract Letter - Letter outlining the specifics of the delinquent contract to the payer.

coupons can be sorted by Contract ID or Parcel range Delinquent Contract Coupons - System-generated printable coupons for delinquent contracts. The

Post Applied Interest/Penalty Calc Charges For Voided Contracts – Applies interest for voided contracts. Creates interest records for flagged parcels or parcels with voided delinquent contracts.

Delinquent Contract Payment History Update- Updates monthly amounts billed for delinquent contracts

## Manufactured Homes (MH)

#### Purpose

maintenance of data that includes: The purpose of the Manufactured Homes module is to allow the user to maintain and track manufactured homes valued as either Real Property or Personal Property. The Manufactured Homes module allows

- Parcel ID of the land parcel where the MH is located and/or Personal Property Account ID
- The make, model and serial number of the MH
- Inventory data including dimensions and year of manufacture
- Title Number
- Date of purchase by current owner
- Location data including trailer court ID and lot number if applicable

Jurisdiction can define unique data elements to store and maintain. Contained within the Manufactured Homes module are a number of user-defined fields for which the

Major features of the Manufactured Homes module will include

- Online application processing and printing
- Ability to store both Real and Personal Property manufactured homes
- Retrieval of owner data from existing tables that prevent duplication of data and ensure

# Manufactured Homes General Description

maintenance of data elements in addition to those found in the CAMA Other Building and Yard (OBY) property or personal property. For Real Property accounts the Manufactured Homes module allows the manufactured homes stored on the database. Manufactured Homes can be valued either as real The Manufactured Homes module allows the user to maintain descriptive account information relating to

selected and is tied to the Manufactured Home being maintained. code, year built, dimensions (for OBYs), area or SFLA, and value. The specific card/line can then be table in which the improvement exists (DWELDAT or OBY), Card #, Line # (for OBYs), Style or OBY retrieves all current dwelling and OBY entries. The information returned from the lookup includes the table. This allows multiple manufactured homes to reside on a single parcel. A lookup is provided that Manufactured Homes records can be tied to a specific card or line number within the dwelling or OBY

# Manufactured Homes Data Management

#### Manufactured Home

- Make
- Model
- Year Manufactured
- Length
- Width
- Serial Number
- Title Number

#### Owner

- Name
- Address
- Social Security Number

#### Valuation Information

- Purchase Price
- Real Estate Reduction
- Assessed value
- Homestead Value
- Net Reduced Value
- Original Charge

# **Manufactured Homes Related Reports**

Year To Date Collection - Unsettled Payments collected to a specified date.

First and Second Half Delinquent Tax - Listing of parcels (by Summary or Detail) with unpaid balances

Tax Bill - Listing of current and delinquent charges for owner by the half.

Tax Abstract - District listing of total parcel values and total taxes levied.

Tax Bill Totals - Total taxes billed by district or by cycle for a specified tax year.

Tax Duplicates - Listing of taxes billed by district and charges by parcel for a specified tax year.

Paid Duplicates - Listing of payments by parcel for a specified tax year.

Rollover - Year end process of rolling Tax, CAMA and AA information forward to the next year

Batch Tax Calculation - Beginning year process that calculates taxes based on value and district.

Penalty Calculation - Process that calculates penalty on unpaid charges for a given cycle

#### CONCLUSION

Choosing a computer system that can handle a Jurisdiction's needs can be complicated.

IAS brings with it adaptability and the most complete package available in property tax software. This is backed by one of the appraisal industry's most respected names, Cole•Layer•Trumble, and the leader in business software, Oracle.

Using an integrated software system such as IAS, all parcel and tax data can be maintained with one complete database. Many everyday office functions within the Jurisdiction can be performed from the desktop PC. For Jurisdictions switching to an integrated software system, IAS Offers the benefits of flexibility, reliability, comprehensive functionality, and a proven track record.

# **EXHIBIT 4 - SOFTWARE LICENSE**

# ORACLE® Application Products

The following Oracle® products are included in run time mode with the base IAS System.

### A. ORACLE® Products

SQL\* FORMS® / DEVELOPER 2000 ORACLE RDBMS® (Version #8.1.5 or higher) on the Server specified in Exhibit 5.

SQL\* PLUS® SQL\* DISCOVERER

SQL\* REPORTWRITER®

SQL\* MENU®

SQL\*NET

The following terms and conditions shall be adhered to as part of this Sublicense Agreement:

- The County shall use the Runtime Program in object code form only on the Server located in Henry County and approved by the Contractor.
- à shall not transfer its rights under the Sublicense Agreement without the permission of the Contractor. Programs available on any time-sharing or other rental arrangements. The County the event of computer malfunction. archival purposes and to transfer the Runtime Program to a backup computer in The County shall have the right to duplicate the Runtime Program for backup or The County shall not make the Runtime
- Ç of this Agreement. The County shall not cause or permit the revenue engineering. The County shall not use the Runtime Program for any purpose outside the scope disassembly or decompliation of the Runtime Programs.
- d. Title shall not pass to the County.
- Oracle Corporation shall not be liable for any damages, whether direct, indirect, incidental or consequential arising from the Runtime use of the programs.
- ٠ and shall destroy or return to the Contractor, the Runtime Program, At the termination of the Sublicense Agreement, the County shall discontinue use Documentation and all archival or other copies of the Program
- ůσ Program. The County shall not publish any results of benchmark tests run on the Runtime

- the Contractor has Sublicensing rights under this Agreement. The County shall not transfer the Runtime Program outside the territory for which
- that the Runtime Programs are not reported in violation of the code and The County shall agree to comply fully with all relevant regulations of the United State Department of Commerce and with the U.S. Export Administration to assure
- support equipment. facility or for the flight, navigation, or communication of aircraft or ground for use in the planning, construction, maintenance, operation or use of any nuclear The Runtime Programs are not specifically developed, manufactured or licensed
- Oracle Corporation shall be a third party beneficiary of the Sublicense Agreement.

### B. IAS Base License Fee

and software to the County: The Company will supply the following Integrated Assessment System (IAS) Licenses

- a) IAS-Assessment Administration
- b) IAS-CAMA
- c) IAS-Tax Billing/Tax Collection
- d) Delinquencies
- e) Hearing Tracking
- f) Personal Property

data collection device (Pen-Based). includes, but are not limited to, a terminal, a PC used as a terminal, modem, hand-held number of users which can access the database and/or functional programs which Concurrent User for IAS and Oracle® Software shall be defined as: the maximum

reviews at the Client site to insure the Client is in compliance with the terms and conditions of the IAS and ORACLE® licenses. (User version) Verification of License Terms: The Company reserves the right to conduct on-site

## C. IAS Software Warranty

#### a. Warranty Support

The Contractor warrants that the IAS software, when operated on the hardware specified herein will perform the functions described in the IAS Base System Description, Exhibit 3.

### b. County Modifications

modification of any of the Contractor's software that it desires to make The County shall inform the Contractor in writing of any change to or

#### Negligence

installed pursuant to this Agreement. other improper action by the Department operating the Contractor's software negligence, improper installation or operation of the Contractor's software, or to correct any defects in any of the Contractor software caused by the County's At any time during the Period of Agreement the Contractor shall not be required

the functions affected by said Amendments, warranty and the Contractor's obligation shall immediately terminate as regards Should the County fail to install any Amendments supplied by the Contractor, the

#### a. <u>Disclaimer</u>

WARRANTS THAT THEY ARE CAPABLE OF AND SUFFICIENT TO CONTRACTOR TO THE COUNTY UNDER THE TERMS HEREOF, AND TO USE IT'S PROPRIETARY SOFTWARE, FURNISHED BY THE INCLUDING A NON-TRANSFERRABLE AND NON-EXCLUSIVE LICENSE SPECIAL OR INDIRECT DAMAGES OF ANY NATURE WHATSOEVER. avoidance of defects as specified in Article 7 of the Articles of Agreement. THE ACCOMPLISH THE TASKS FOR WHICH THEY ARE SUPPLIED TITLE TO AND THE OWNERSHIP OF ALL MATERIAL AND PROPERTY, CONTRARY. THE CONTRACTOR WARRANTS AND GUARANTEES THE REGARDLESS OF ANY PROVISIONS HEREIN CONTAINED TO THE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, LOSS OF BUSINESS, EQUITABLE THEORY. IN NO EVENT SHALL THE CONTRACTOR BE NEGLIGENCE, STRICT LIABILITY IN TORT, OR ANY OTHER LEGAL OR FULFILLMENT OF ALL LIABILITIES TO THE COUNTY IN RESPECT OF WARRANTIES. CORRECTION OF DEFECTS BY THE CONTRACTOR IN EXCLUDES ANY SUCH OTHER REPRESENTATIONS AND LAW WARRANTY. THE CONTRACTOR EXPRESSLY DISCLAIMS AND PARTICULAR PURPOSE AND ANY OTHER STATUTORY OR COMMON TITLE, OPERATION, MERCHANTABILITY OR FITNESS FOR A SOFTWARE, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF OTHER REPRESENTATIONS AND WARRANTIES RELATING TO THE WARRANTIES SET FORTH IN THIS PARAGRAPH ARE IN LIEU OF ALL ANY DEFECTS IN THE SOFTWARE, WHETHER BASED ON CONTRACT THE MANNER PROVIDED IN ARTICLE 7 ABOVE, SHALL CONSTITUTE The Contractor shall have no liability under the warranty except the correction or

# **EXHIBIT 5 – HARDWARE CONFIGURATION**

The final hardware requirements will be mutually agreed upon by the county and the Contractor and detailed in the final hardware configuration document.

The Contractor will work with the County and other necessary parties to define hardware requirements and configuration for the IAS installation. This Hardware Configuration will be provided within ten (10) days of contract execution.

# EXHIBIT 6 - ONGOING MAINTENANCE AND SUPPORT

# 1.0 SERVICES TO BE PROVIDED

technical support for the IAS software currently installed in the County, as stipulated in the Scope of Services. The Contractor will provide to the County in a professional and workmanlike manner the

## 2.0 PERIOD OF SUPPORT

of the then current support period, extending support for the following year at the then Contractor will notify the County in writing, thirty (30) days prior to the expiration date support periods will begin on January 1, 2006 and cover a one year period. The to the Company. current support rates. Section 8.0 of this Exhibit 6 includes the cost of the IAS Support by module. The period of initial IAS Support shall be June 1, 2002 through December 31, 2005 The County will acknowledge acceptance of these items in writing Subsequent

# 3.0 IAS MAINTENANCE SUPPORT

support period. will invoice the County monthly for the IAS Maintenance Support at the start of the for IAS Maintenance Support for the period stated in paragraph 2 above. The Contractor The County shall pay the Contractor the fee as described in Section 8.0 of this Exhibit 6

products installed at the County as follows: This maintenance support is for a specified number of concurrent users for the IAS

IAS Assessment Administration
IAS CAMA
IAS Tax Billing/Tax Collection
IAS Delinquencies
IAS Hearing Tracking
IAS Personal Property

and deliver any amendments or alterations (the "Amendments") to the software that are in accordance with the functions set forth in the system as developed under this delivery, or is discovered during County usage, and affects performance of the software necessary to correct or avoid any defect in the software which is present at the time of During the maintenance period, the Contractor will design, code, check out, document

submitted in writing during the maintenance agreement period. Oral notification or other unwritten complaints will not constitute notice The Contractor shall only be responsible to correct defects, which are documented or

# 5.0 ANNUAL ORACLE® TECHNICAL SUPPORT FEE

Annual ORACLE® Technical Support on January 1 of each year. Runtime license. The Contractor will invoice the County in one installment for the described in Section 8.0 of this Exhibit 6 for technical support for the ORACLE® The County will pay the Contractor an Annual ORACLE® Technical Support Fee as

Runtime mode: The ORACLE® Technical Support covers the following ORACLE® products in a

ORACLE RDBMS®/DEVELOPER 2000

SQL\*FORMS®
SQL\*PLUS®
SQL\*DISCOVERER
SQL\*REPORTWRITER®
SQL\*MENU®

# 6.0 LAS SUPPORT ACTIVITIES

The Contractor shall be available to furnish the County with the following services:

# 6.1 IAS MAINTENANCE SUPPORT

6.6.1 changes subsequently added to this group of products called Base System, when Maintenance Support. The Contractor warrants that the Integrated Assessment System IAS-CAMA, AA, TB&C, DEL, HT, and PP software, plus any State of operated on the County supplied server, will perform the functions described in the IAS User's Guide. Indiana non-site specific software changes and any Henry County site-specific

modification of any of the Contractor's software which it desires to make The County shall inform the Contractor in writing of any change to or

action by the Department operating the Contractor's software installed pursuant to improper installation or operation of the Contractor's software, or other improper defects in any of the Contractor software caused by the County's negligence, of Support, of this Exhibit 6, the Contractor shall not be required to correct the Scope of Services. At any time during the duration of this Agreement as stated in paragraph 2, Period

send a copy of the new IAS-Modules base system source code to the County as concerning enhancements it has made to its IAS Product. The Contractor will Periodic Updates. The Contractor will make available to the County information new releases are made available.

making any and all site-specific modifications to the new base system source code that had been included in the prior versions. executes properly on County hardware. The County will also be responsible for hardware and executing appropriate tests to ensure that the new base system The County will be responsible for installing the new base system on County

- 6.1.3.Source Code. The Contractor agrees to furnish the County with a copy of the IAS parties without the prior written approval of the Contractor. exclusive use of the County. The County cannot provide the software to a third base system source code. The software is proprietary and is provided for the party or parties, or cannot use the software for the benefit of a third party or
- 6.1.4 this Exhibit, PERIOD OF SUPPORT, the County shall have all voting privileges as defined in the IAS Users Group Bylaws, for each of the installed IAS Modules LAS Users Group. For the duration of this Agreement, as stated in paragraph 2 of
- 6.1.5. software modifications and updates supplied by the Contractor on a timely basis. Responsibilities of the County. The County is responsible for installation of

the installed system. the Contractor on a regular basis to facilitate the Contractor's off-site support of the installed software and associated documentation, supplying these changes to The County is responsible for notifying the Contractor of any changes it makes to

time to provide dial-up access to the County's computer on which IAS is installed. The County is responsible for maintaining necessary equipment and computer

### 7.0 SYSTEM SUPPORT

operating the installed system The Contractor will provide technical assistance in resolving problems associated with

## 7.1 HELP DESK SUPPORT

problem whether user error, operation related error, or software error and recommend appropriate corrective action. The assistance will include error resolution, assistance in determining the source of the

new user or operational procedures and modify its existing procedures The Contractor will also provide technical assistance to the County in establishing

The Contractor may also provide:

- options, etc.) for the execution of various IAS subsystems Recommendations of job set-up (specification of parameter options
- Verification of output and recommendations for corrective action

#### 7.2 SUPPORT HOURS

for critical processing activities, if such support is scheduled at least 3 working days through 6:00 PM EST. The CLT Help-desk is available weekdays (except holidays) from the hours of 8:00am Additional support coverage is available on an as-needed basis

correct IAS system bugs and deficiencies. the nature of the problem is isolated to the IAS application, CLT will troubleshoot and Support. CLT staff will assist in problem diagnosis and resolving operational problems. If Personal Computer, Local Area Network, communications, Oracle database (security, for determining that the problem is related to the IAS application software and not the County. County staff will provide first line support for end users and are responsible by designated County staff (limited number of people), who are the front line support for to the support desk will be returned within four (4) working hours. Calls will be placed 8am-6pm EST through our Dayton based support desk. Calls may be placed using our toll issues. Support for these types of issues are addressed in section 1.2, Technical System permissions, tuning, backup and recovery) or other similar processing infrastructure type free phone line (1-800-487-8326) or problem reports can be logged via the internet. Calls IAS Help Desk Support. This service provides for unlimited Help Desk support from

plan to resolve the problem within a reasonable time period suitable to all parties. addressed under the warranty provisions of the agreement, as described in 1.1.1 Maintenance Support. CLT will work with the Counties to resolve problems within 24 hours or provide a to have the appropriate support personnel work the issue(s) and provide timely work-around or temporary fix until a permanent solution can be implemented. Those issues that are of a warranty nature (correct program bugs, significant documentation errors, etc.) will be In response to the nature and urgency of the reported problem, the Company shall take steps

and materials portion of the agreement. etc.), system changes to address statutory changes, etc. will be addressed under the time problems of a user initiated nature (help in programmatically fixing user data problems, Those issues that are requests for system modifications or enhancements, , fixes to

# 7.3 SUPPORT CONSIDERATIONS

reported problem, the Contractor shall take steps to have the appropriate support working hours of the initial call. The contractor shall maintain daily contact with the permanent solution can be implemented. personnel work the issue(s) and provide timely work arounds or temporary fixes until a County until the problem is resolved. In response to the nature and urgency of the The Contractor shall respond to the County's request for phone assistance within four

#### 8.0 SUPPORT FEES (Included in Total Project Fee)

\$18,630 (for 3 years)	ICAL SUPPORT	ORACLE ANNUAL TECHNICAL SUPPORT
\$12,000	1,52% 1,54%	Hearing Tracking
\$12,000		Delinquents
\$12,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Personal Property
\$30,750		Tax Billing/Tax Collection
\$30,750		Assessment Administration
\$19,500		CAMA
Annual Support Fee	An	Product
RT FEES FOR ber 31, 2005 es:	MAINTENANCE AND SUPPORT FEES F January 1, 2003 through December 31, 2005 LAS Products Support Fees:	LAS MAINTENANCE AND SUPPORT FEES FOR  January 1, 2003 through December 31, 2005  LAS Products Support Fees:

# EXHIBIT 7 - COUNTY RESPONSIBILITIES

#### 1.0 INTRODUCTION

Project Work Plan. project participants, including the Responsibilities of the County. Attachment 1 is the teamwork. This Exhibit sets forth the Project assumptions covering the interaction of the The implementation process is interactive and intensive. Success requires close

require the use of a meeting room. contractor's staff during the phase and whether the number of persons involved will also contains an estimate of the number of county staff who will need to work with the staff who will need a suitable work environment as detailed in Section 1.4. Attachment 1 Attachment 1 contains an estimate for each phase of the project of the number of on-site

adjustment and refinement during the project planning process. which extend over several months, represent maximum needs during the phase. The estimates in Attachment 1 are for planning purposes only and are subject to The estimates for phases

### 1.1 General Assumptions

- decisions made during the planning, analysis and preparation of the detailed functional specification phases of the project, the Contractor's scope of effort does not include activities related to the modification of current County processes, practices, procedures or While Business Process Reengineering (BPR) activities are a natural outcome of
- schedule, the change control process as described in the Project Work Plan. Should activities such as County BPR efforts affect the mutually agreed upon

# 2 Project Infrastructure and Logistical Assumptions

- the upcoming Phase will be a component of the final deliverable for each mutually agree to the objectives and timetable for that Phase. The detail plan for the Contractor will review the detail tasks to be completed for the next Phase and outlined in Exhibit 2. Prior to the completion of a previous Phase the County and Detail planning for each Project Phase will occur in accordance with the schedule
- 1.2.2 available the appropriate members of the user community to participate in system Functional Specifications and participation in interim and final acceptance testing walk throughs, design review meetings, review and sign off on the Detailec Within the context of the mutually agreed to Project Plan, the County will make
- 1.2.3The County will provide the technical support services as delineated in Attachment 1.

### 1.3 Training Assumptions

- appropriate, for members of the project team. training plan and schedule. The Contractor will recommend training, as County personnel will attend applicable training as part of a mutually agreed to
- installation of software such as Oracle Applications On site training for County staff will be scheduled to occur after

# 1.4 Project Environment Requirements

- by Contractor personnel. incurred on site at County locations except long distance phone charges initiated facilities. The Contractor will not be charged for any project-related expenses computer access, access to the County network, dial out phone access to environment will include, but is not limited to: work space, computer hardware, Contractor facilities, use of County owned software tools and reasonable access to The County will provide a suitable project environment for the project team. This
- 1.4.2 at the County site(s) and verified as to the correct versions and readable The County and Contractor will determine that appropriate software media will be
- 1.4.3 manuals will be supplied by the Contractor. Oracle suggested technical reference manuals. An electronic copy of the Oracle available at County sites. The County will maintain a reference library containing The County will ensure that all current Contractor software documentation will be
- 1.4.4 County systems personnel will be available to work with the Contractor for installation and upgrade of application and data base software. adjustments to operating systems configurations and specifications during the
- 1.4.5 normal data administration functions and activities The County will assign adequate DBA resources and will assist the Contractor for
- 1.4.6 The County will provide secured file space, which will not be publicly available to all project team members for use by Contractor.
- 1.4.7 The County technical staff will be available up to a full-time basis during the stages to provide data and data format information to Contractor. Detailed System Walkthrough, Operations Analysis, Solution Design and Build
- 1.4.8 County is reconciled and free of error to be converted on an as-needed basis and the County will ensure that all data coming from the The County will provide the Contractor with a mechanism to access County data
- 1.4.9 The County and the Contractor will work together to map data from the existing County applications to the applications for the conversion modules in the unplementation phase.

1.4.10 The County will be responsible for interim and final acceptance testing of applications and in introduction of those applications to the County's production environment.

## 1.5 Management Responsibilities

- The County and Contractor will establish project managers and identify a steering community. committee for the project to encourage a sense of project ownership by the user
- 1.5.2the County on all issues and will be responsible for the project from the County and make timely decisions. The project manager will be able to act on behalf of perspective. The County will also assign an IT representative who will coordinate The County will assign a project manager who will be available to review issues the activities of this project with other County IT initiatives

## .6 Operating Requirements

- The County will make available at no cost to the Contractor, appropriate resources needed to transfer County application and system knowledge to the Contractor Project Team.
- 1.6.2 critical business knowledge need to be available to support the project. The County and the Contractor will determine if other County resources having
- 1.6.3 an acceptable level of performance and readiness so as to minimize disruption to The County is responsible for maintaining the hardware and network resources at the project environment.

## 1.7 <u>Technical Assumptions</u>

- network design, hardware capacity planning, network performance testing, etc architecture and hardware. The County is responsible for specific tasks relating to Performance goals for the applications are heavily dependent on the technical elements not supplied by the Contractor. The Contractor will not warrant the performance of servers, network or other
- 1.7.2liaison to the Contractor team when and where needed The County technical staff non-team members will be assigned as needed to act as
- 1.7.3 the actual staffing, support the implementation efforts. The County and the Contractor will determine The County will provide adequate functional and technical team members to
- 1.7.4 project activities. County personnel will complete sufficient training to successfully complete
- 1.7.5 completion of County project responsibilities. The County will assign sufficient resources to the project to ensure timely

# CONTRACT DISTRIBUTION FORM

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W A Henderson	Signed By:
Software and Professional Services	
IAS	
Henry County, IN	Project Name:
84520	Project Number:

IAS Lic: \$100,100.00 28,240.00 320,130.00 117,000.00

Oracle Lic IAS Install IAS Spt

Oracle TS Total Fee: \$584,100.00 18,630.00

Period of Agreement:

Signed:

May 22, 2002

Job Starts:

Completion: 220 days after

execution of this agreement -IAS Support through 12/31/05

Distribution: June 3, 2002

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